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OBTAINING FINANCIAL AID FOR A DEVELOPMENT PLAN

THE EXPORT-IMPORT BANK OF WASHINGTON LOAN TO AFGHANISTAN

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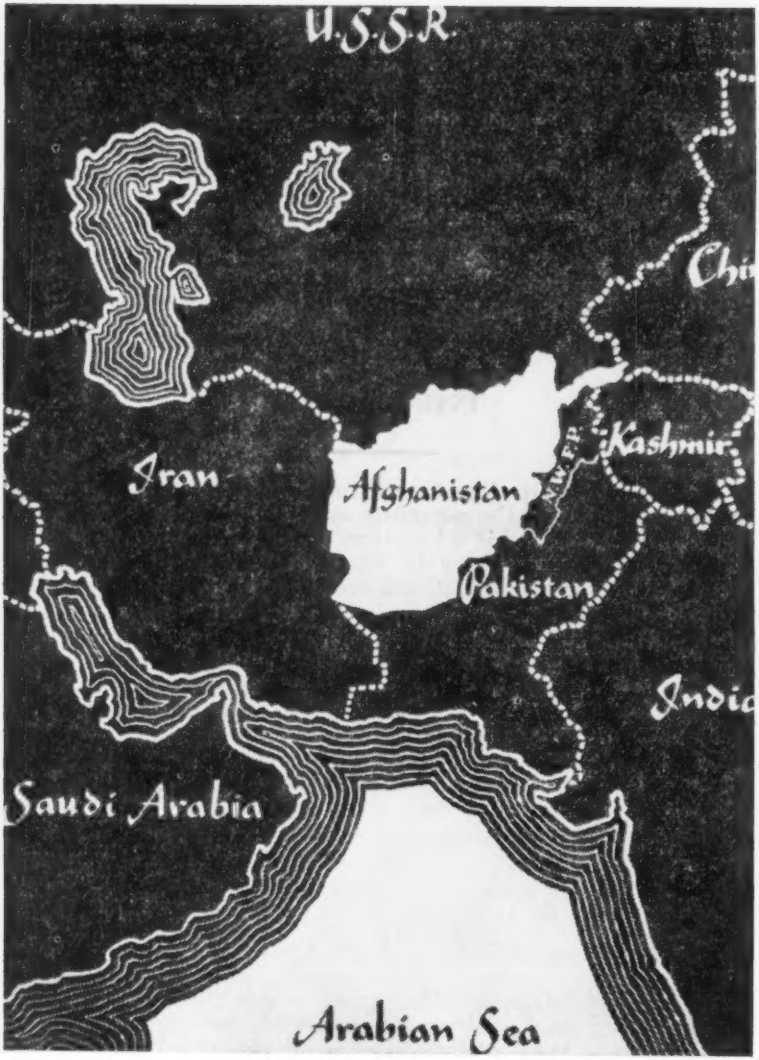
INTRODUCTION

The following study of the Export-Import Bank loan to Afghanistan has been presented to the committee as an analysis of procedures and considerations involved in a long-term development-type loan.

We are indebted to Peter G. Franck, economic consultant and adjunct professor of international economics of the American University, for this contribution.

HOMER E. CAPEHART.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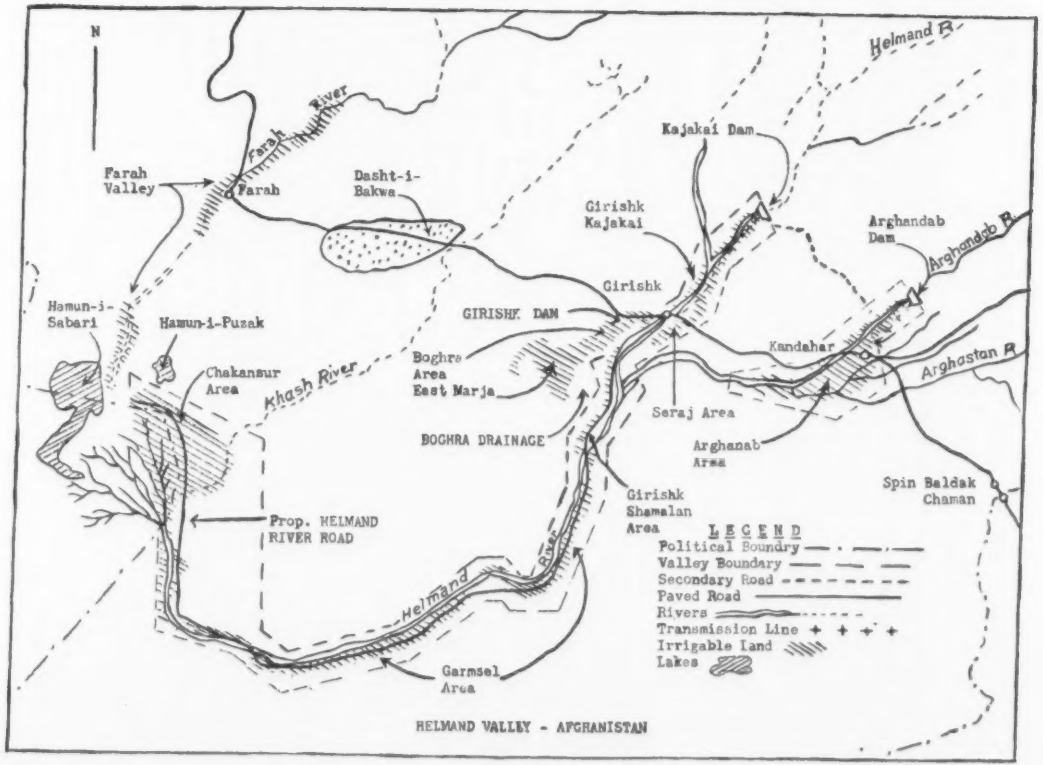
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HELMAND VALLEY - AFGHANISTAN

OBTAINING FINANCIAL AID FOR A DEVELOPMENT PLAN

The Export-Import Bank of Washington Loan to Afghanistan

By Peter G. Franck, Economic Consultant and Adjunct Professor in International Economics, American University

[In preparing this study the author had access to unclassified records of the Export-Import Bank of Washington and the files of the Morrison-Knudsen Co. In addition, the author acquired data and impressions while serving as adviser to the Afghan Minister of National Economy, 1948–50. All facts pertaining to the loan have been drawn from these sources unless otherwise indicated. Special acknowledgement is due to the officers of the Export-Import Bank and to the staff of the Washington office of Morrison-Knudsen Co. for their generous counsel.]

I. Afghanistan's Economic Impasse and Its Washington Mission

Obstacles to progress

A landlocked plateau crisscrossed by mountain ranges, Afghanistan has long suffered from extremes: desert plains watered by irregularly flowing streams, narrow river valleys rich with intensively irrigated crops, rigorous winters in the high mountains, hot dry summers in the deserts and steppes. Most of the soils hold neither the brief and scattered rain nor the rapid snow thaws, so that cultivation has lagged, holding food and feed crops to subsistence levels and necessitating food imports in drought years. Industrial activity has been hampered by small markets, a lack of cheap and rapid transportation facilities, and not enough managers. Furthermore—

> * * * physical and economic resources, including her productive manpower, were sacrificed in a long series of foreign wars and internal strife, to obtain and protect her national independence and a stable central government.[1]

Large funds and efforts spent on public works and industrial projects between the two World Wars could have made a greater improvement in the standard of living (as Afghan officials realized), had it not been for the incompetence of some government officials, the indifference of the royal family and leading private citizens to the people's economic welfare, and the inefficiency or lack of foresight on the part of foreign engineers and contractors—German, Italian, Czechoslovakian, and Japanese. Furthermore, there was little recognition of the interrelation of individual projects and the need for educational and economic preparation. The country was dotted with unfinished or crumbling dams, canals, and other public works.

The experience of World War II—adverse terms of trade, severe inflation, interruption of consumer goods imports—provided the stimulus for an intensified economic development effort in which the business groups and the Government joined hands. An ambitious road and irrigation construction contract with an American firm in 1946 signaled the beginning of a new wave of large-scale investments by the Government. All were to be financed from accumulated exchange reserves and the current favorable trade balance.

[1] Afghanistan's Economic Development Plan and Her Current Difficulties, prepared by the Minister of National Economy, Washington, February 1949. (Hereafter referred to as Economic Report.)

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In 1947 a crisis in Afghanistan's international economic position developed, caused at least in part by 2 years of inadequate rainfall. Cotton production for export was eliminated and fruit exports halved. Seventeen thousand tons of American wheat had to be imported. Interruptions of trade across Pakistan cut to 52,000 the number of karakul lambskins (the leading dollar-earning export) arriving in New York in 1947, compared with 3,332,000 in 1946. Their average price dropped to the lowest level since 1943.

In 1947 the overall trade surplus dwindled to about $4 million from $12 million in 1943 and $18 million in 1944.[2] The deficit in trade with the United States in 1947 was $3.8 million as contrasted with surpluses ranging from $20 to $30 million in each of the years 1944, 1945, and 1946. Moreover, in 1947, $7.5 million had to be paid out for construction work by an American firm in the 2 years ending March 1948. Afghanistan's current international obligations exceeded income by $14.9 million, forcing a corresponding reduction in the foreign exchange reserves of the state bank (Da Afghanistan Bank) and the commercial bank (Bank-e-Millie). By the fall of 1948, the Government reported, the Afghan people had started paying the foreign bills with their health, clothing, and shelter. Unwilling to interrupt its development projects, the Government found itself pressed to locate outside help.

Development plans and projects, 1946–48

The Government's recognition of the need for major economic and social development projects grew not only out of the widening gap between international obligations and income, but also out of the aspirations of millions of underemployed, improverished people. The Minister of National Economy pointed out that—

> * * * after years of strain and sacrifice, the political fabric of this peace-loving nation is threatened. If no means can be found to deliver her from her economic plight, peace and stability and the cause of democracy in Afghanistan will suffer a severe setback.[3] * * *

The 1946 contract with the Morrison-Knudson Co., Inc., of Boise, Idaho (hereafter referred to as M–K) for 3 road projects and 5 dams and several irrigation projects had given the country a large and efficient supply and service organization, but construction work was slowed to a snail's pace by strikes in the United States and transit delays in Pakistan. By June 1948 a third of the scheduled tasks had been completed, at a cost of $11 million, $4 million of which had gone for work camps and equipment. Much money had gone into standby operations, and the Government had to pay the overhead expense of unfinished jobs. M-K's work appeared slow and expensive to the Afghans but an important part of the delay was due to the Afghan Government itself. The Government's plans and cost estimates turned out to be insufficiently detailed to permit construction according to the original schedule and officials remained uncertain about overall development plans of which M-K projects were an integral part.

Meanwhile, the Minister of National Economy, Abdul Madjid Khan, with a cabinet committee, had worked on a 12-year plan covering industry, mining, oil, education, health, and public works, to cost

[2] Based on returns filed with Afghan customs. Trade and financial transactions carried on by the tribes accounting for perhaps one-third of all trade, are not recorded.

[3] Economic Report, p. 133.

$450 million, $100 million of which was to be borrowed abroad. Along with new technology, the United States was expected to supply the financing. But this plan, informally presented to the Export-Import Bank of Washington (hereafter referred to as the bank) and private American banks, was coolly received since details were lacking and the allocation of 15 percent annually of the estimated gross national product for development seemed too ambitious. Under Minister Madjid's direction another government planning committee developed a 6-year plan, excluding health and education, to cost between $95 and $100 million ($70 to $75 in dollars). It was hoped that $50 to $55 million could be borrowed from the United States, the rest of the dollars to come from the country's accumulated exchange reserves. Surveys and cost estimates were available for half the projects. When late in the summer of 1948 this plan was brought to the United States by Minister Madjid he was advised by United States Government officials first to prepare an analysis of his country's economic difficulties and then to present the case for a bank loan.

Meanwhile, M–K hoped that with supplies coming in regularly it could concentrate on a few worthwhile public work projects. Apparently, only by getting under way with a 5 to 7 million dollar annual construction volume for 3 to 4 years could M–K's large, expensive organization be made to pay for itself. At stake were the reputations not only of M–K as a firm but also of American engineering generally. Accordingly M–K's program, drawn up in cooperation with the Minister of Public Works, Mohammed Ludin, in December 1948, called for new expenditures over 6 years of about $25 million on building or reconditioning 7 storage dams and related irrigation structures and of $2 million on surveys of roadbuilding and reclamation. A dollar outlay of $20 million was anticipated. This program, lower in annual volume than what M–K's capacity in Afghanistan could handle, took account of the limited financial resources of the country, but it did not allow for industrial projects.

Minister Madjid's mission to Washington in the fall of 1948 faced a double task: Out of the plethora of plans it was to submit to the United States Government one which might most quickly lead to a loan. At the same time, the plan approved by the United States would have to satisfy the industrial interests of the Minister without cutting too much into the funds available for M–K projects. Without a United States loan there could be no authorization for these projects, and without the authorization M–K would be unable to make good on the past investments.

Composition of the mission to Washington

Head of the mission was Abdul Madjid, Minister of National Economy since 1939, and probably Afghanistan's strongest leader in economic policy and private investment. With the help of the Government he established the first bank (Bank-e-Millie). In cooperation with many other wealthy traders and members of the royal family he extended the bank's interests into many lines of industry and trade, both national and international. Most important from the point of view of the hoped-for dollar loan, he controlled the exclusive export outlet for the dollar-earning karakul skins. Supporting the Government's postwar economic development program, his ministry had also assumed control over the Ministries of Public Works, Mines, and Transportation.

As a matter of political expediency, Minister Madjid had recognized the need for allying himself not only with the royal family but also with the intelligentsia. His assistant minister and right-hand man on the mission was Abdul Hai Aziz, one of Afghanistan's most able economists. Steeped in the Muslim tradition, his advanced education in France and Italy had made him a fervent believer in social progress as the major avenue to the political and economic emancipation of his country. Conscious of the need for the uneasy alliance with the business interests, he frequently found it difficult to distinguish between policies primarily advancing the public interest and those serving the private interests of Minister Madjid.

Other mission aides included the German-trained president of the Afghan Textile Co., Amir-ud-Din; another German-trained businessman, subsequently responsible for the restoration of the Afghan-German trade, Dr. Abdul Rauf,[4] a practical diplomat and a quick maker of decisions; and officers of the Afghan-American Trading Co., particularly its Hindu manager, Hokom Tschand, who later became vice president of Bank-e-Millie.

The mission's motivation

Mission members were convinced that, to accelerate the essential economic improvement and social reform, the Government had to assume greater responsibility in the economic domain. It also had to encourage greater participation by the leading social groups—too long complacent, conservative, and privileged in their isolation from the troubles of the average Afghan.[5] Economic changes enforced in Soviet territories adjacent to Afghanistan encouraged unfavorable comparison with slow economic progress inside the country. Lack of popular confidence in the country's economic leadership could also undermine the Government's controversial stand vis-a-vis Pakistan on control over the irredenta Afghans in the Northwest Frontier Province and vis-a-vis Iran on control of the Helmand River waters. Accelerated economic development might build up that confidence.

The example of Turkey was always present in the minds of mission members. Its internal problems had been similar. More than once the wish was expressed that Afghanistan had an Ataturk to straighten out and run its national affairs.[6] On a practical level Turkey's economic achievements were of interest, particularly its balancing of agricultural means of livelihood with industrial enterprises and its channeling of American aid for that purpose. Actually, the concept of a government investment plan, allocating money and resources to specific uses over a period of years, had been introduced into the Middle East by Turkey.

The American adviser

The mission needed a specialist in international economics and finance, "knowing the ropes" of United States Federal bureaucracy but, to avoid a possible conflict of interests, not recently in the Federal Government. He would have to train himself on the job and adjust his views to his employers' cultural and political objectives.

[4] Dr. Rauf was appointed Minister of National Economy late in 1953.

[5] Minister Madjid had already accorded Bank-e-Millie and textile-mill employees benefits like disability insurance, company housing, and wages scaled to living costs. But such benefits were not general enough.

[6] Ruling from 1918 to 1929 Afghanistan's King Amanullah had tried to emulate Ataturk's drastic reforms. But his failure to unite a strong and satisfied army behind him, his excessive favoritism, his lack of political skill, and the age-old isolation of the Afghan people from western ways brought his downfall in the face of strong opposition by the mullahs (village priests).

The man the first assistant minister appointed (hereafter referred to as the adviser), had served as adviser to the Afghan delegation at the United Nations Conference on Trade and Employment at Habana (1947–48). The contract signed on November 6, 1948, stipulated that the adviser would edit and supplement reports originating with the mission, provide economic analysis, and discharge related assignments. Much of his activity turned out to be teaching—creating in officials averse to long-term commitments a receptivity for economic planning and a confidence in the Government from which they sought financial assistance.

The obstacles the adviser faced were also stimulating challenges. The language barrier was not the most difficult since the adviser spoke English, French, or German with the individual members. His lack of Afghan-Persian was a handicap only when the group tried to interpret more abstract concepts like free enterprise or social security and other terms whose precise meaning depended on the cultural context in which they originated. A more serious handicap in establishing smooth working relationships between the adviser and the mission was the lack of conformity in mental habits and propensities. It was impossible to apply or adapt the general principles of acculturation since so many were primarily related to contacts with primitive people. The only practical way of approaching this group of hybrid intellectuals, ambitious businessmen, and enlightened Government officials was to deal with them as coequals. With little cultural caution but a large dose of tolerance for Afghan idiosyncrasies, including extreme sensitivity in matters of national sovereignty, the adviser eventually developed frank and cordial working relationships.

A major challenge for the adviser lay in defining United States policy and the adviser's relationship to the group. The Afghans expected him to rationalize, although not necessarily to justify, the objectives and methods of American foreign policy, especially in the Middle East and the periphery of the Soviet Union. Even for this friendly group it was virtually impossible to reduce the multifaceted policies of the United States in one region to a theme more specific than peace and friendship. The adviser would have needed longer and more intimate association with the Afghans to make the coexistence of several apparently conflicting United States policies understandable to people looking at the world from such a different vantage point.

Although the adviser's service to the Afghan Government was generally in line with the United States Government's interest in helping underdeveloped countries, he made clear that—

> * * * however enthusiastically I applaud the President's recent statements on * * * underdeveloped countries and welcome an American Government program which will assist Afghanistan and its neighbors, I am interested in continuing my work with you as a citizen of the world and not in any way as an arm of the American Government.[7]

Thus he did not have to conform with the diplomatic niceties governing relations between official representatives, nor to define and defend American national interests as they related to Afghanistan, nor to confine his work to the framework of those interests. Independence from official American policy permitted him freedom of inquiry and judgment.

[7] Letter from adviser to Minister of National Economy, February 2, 1949.

The assignment provided the adviser with an unexpected opportunity to test and to apply rapidly increasing theories of economic development, and at the same time plan socially effective action. To make old soil productive again, to employ partly idle men and resources, a workable development plan had to be formulated and the United States Government won over to helping finance it. The adviser's eagerness, perhaps overeagerness, to come to grips with the intricacies of the situation, occasionally led to incidents, but it eventually earned him the sympathetic cooperation of the mission.

II. Revamping the Afghan Development Plan

The trend of events in Washington up to the fall of 1948 provided a generally favorable atmosphere for long-term foreign investment plans requiring United States financial support. The establishment of the Economic Cooperation Administration (ECA) seemed to many foreign governments to promise dollars for development programs, however indirect their potential contribution to Europe's recovery. The Afghan mission was particularly impressed by Turkey's success in becoming eligible for ECA aid and in becoming a member of the Organization for European Economic Cooperation. Like Turkey Afghanistan had been supplying prewar Europe with agricultural raw materials in exchange for manufactured consumer and investment goods. Moreoever, the Afghans likened their situation to that of European countries in that rates of capital replacement were "too low to permit expansion of industrial and agricultural production," and that savings from current income were too meager because the standard of living was already so low.[8] Like the French and English, the Afghans needed to increase real investment in more and better productive facilities and, like all European countries, they felt they did not have sufficient domestic resources for investments large enough to make a dent in the underemployment of their resources.

The developing pattern of aid to underdeveloped countries was reflected in President Truman's 1948 request to Congress for an increase in the Export-Import Bank's lending authority from $3.5 billion to $4.0 billion, the new funds to be earmarked for underdeveloped countries. It was hoped that "well-planned development projects * * * economically justified" could be financed from these new funds.[9] Although Congress failed to act on this proposal until October 3, 1951, a new philosophy appeared to influence the bank's policy in lending to underdeveloped countries.

But the United States Government was not prepared to jump to action with a mere application for aid to the Export-Import Bank. In October 1948, when the Afghan mission made its first contact with the bank, the country, though strategically located, had not yet found its place on the checkerboard of the East-West struggle, nor were its resources essential to the United States. Nevertheless, the State Department, whose representative was an ex officio member of the bank's board, recognized the political need for support of the unstable Afghan economy in general and of the work of the American contractor in particular. In the face of the debacle in China, the Afghans

[8] Economic Report, p. 131.
[9] Export-Import Bank, Sixth Semiannual Report to Congress (Washington, 1948), p. 3. National Advisory Council on International Monetary and Financial Problems, Report of Activities * * * to March 31, 1948 (Washington 1948), p. 14.

did not have to play up to the United States' interest in the economic viability of a neighbor of the Soviet Union. No political pledges were offered, nor were any demanded.

The need for data

But it was necessary to create an appreciation of the need for economic cooperation and the soundness of it. The Afghan mission had to spend 3 months talking with bank and State Department officials and writing a 115,000 word economic report before getting a sympathetic ear.

Initially noncommittal (the Afghans called it cold), the bank made clear that (1) it was unwilling a priori to risk a loan to a little known country for a repayment period of more than 12 years, (2) it would hesitate to support a long-term program and would prefer to consider individual projects, and (3) detailed technical, economic, and financial information would be expected for each project, in accordance with its published policy statement.[10] The data required of foreign governments were to include:

(*a*) Justification for financial assistance, including proof that private aid was not available;

(*b*) Purpose for which money was to be used, i. e. materials, equipment, services, surveys;

(*c*) Proposed amounts and periods of repayment;

(*d*) Foreign exchange and gold holdings of government agencies and private business;

(*e*) International financial obligations, past and present;

(*f*) Analysis of the country's capacity to repay the credit on the basis of its current and prospective balance of payments;

(*g*) Effect of individual projects on the foreign-exchange position.

These were disturbing requirements for a mission which could not rely on a central statistical office or on the refined data and skill required to make projections of yearly balances of payments. Although the Minister had a complete file on Afghanistan's international position and raw data for gaging the effect of his plans upon it, he had little material bearing on his Government's financial capacity and virtually nothing about project costs. Without this information it would be impossible to compose a pattern of the amounts of foreign exchange needed over specific periods and to make concrete propositions in regard to repayment. All available statistics were requested from Kabul, and the adviser explored pertinent M–K data on topography, river flow, and local construction conditions.

The Minister's 5-year plan

The Minister unfolded a strikingly simple but comprehensive list of projects proposed by governmental and private Afghan groups for a variety of reasons, some economic, some not. They included irrigation, coal mining, telecommunications, textile, cement, and brick industries, and transportation services. (See table 1.) Over half the funds were for industrial projects controlled by Bank-e-Millie or its industrial offshoots, for most of which surveys had been made. The total cost of the projects was set at $84 million. Of the $65.3 million in foreign exchange needed, $25 million was to come from

[10] Export-Import Bank, General Policy Statement (Revised August 1, 1947), Washington 1947, pp. 10–11.

Afghanistan's foreign trade surplus and the rest, $40.3 million, to be borrowed in the United States. Repayments were to start in the 6th year (when exchange savings resulting from increased domestic textile and cement production were to accrue at the rate of $5.7 million a year) and to end in 11 years.

The gross value of increased annual production was expected to amount to about $20 million, half of it from additional textile output. Annual operation and maintenance costs of the new projects, including foreign engineering assistance, were estimated at $7.3 million, leaving net benefits of $12.7 million a year, equivalent to about 15 percent on the investment. The plan was accompanied by rudimentary economic calculations and professionally prepared engineering reports, with detailed descriptions of the projects' physical layouts and estimates of the quantity and cost of materials and services. But they were replete with reservations necessitated by inadequate surveying, and no time schedule for completion of individual projects was provided.

The chief criteria in selecting the specific projects appear to have been the feasibility of each project based on Afghanistan's experience with the same type of project and the status each project would confer on the sponsoring official or agency. Irrigation expenditures seemed to cluster around projects where the lack of water created the greatest need. The poorer regions were to be given priority to offset regional disparity in economic development. Creating new markets for new factories and developing new sources of agricultural materials were to help other regions as well. Some projects were concentrated in regions where additional investment promised the greatest return in terms of additional production. But there was no evidence that any of these factors had been weighted quantitatively or their relative economic benefits assessed.

The country's capacity to absorb all these projects was not a criterion nor was the size of the individual project. The latter factor was especially important in measuring the public works against available physical and financial resources. Deficiencies in capital or foreign exchange were considered primarily in terms of defects in the body economic, curable by clever financial manipulation at home or tightening of exchange control and securing foreign credits. As to the former factor, it had been assumed, for example, that, because mechanized roadbuilding was more productive per dollar invested, it should replace manual methods. There was no consideration of the probability that such techniques could not be successful without transplanting a western economic environment demanding a far too expensive, synchronized investment program.

There was little integration between projects. For example, 8 of the 9 powerplants (all recommended by foreign engineers) were unrelated to power-buying industries or consumers.

The overall economic target was not expressed in quantified or quantifiable terms. The Minister was correct in arguing that statistical data for this purpose were totally inadequate and that, even had they been available, the complications in calculating specific targets for the economy under so many new influences would make the task impossible. In other words, the changes called for by his development plan were so large that the transfer of underemployed or idle resources to new functions could not be projected in terms of future

small (marginal) additions to the quantities of resources in use. In contrast to the normal (nondeliberate) reallocation of resources in a developed economy which occurs in relatively small amounts over a shorter period of time, the structural changes expected in Afghanistan would be discontinuous, occurring each time under new circumstances. This reasoning logically led to the conclusion that the results of the changes could be measured only after they had occurred.

Determining the target and size of the revised plan.

A correction of some of these defects was sought in adapting devices and quantitative indices used in the Bombay plan, proposed in 1944 by a group of Indian industrialists.[11] In order to hold Afghanistan's overall investment figure to a size compatible both with measurable internal and external resources and with a socially tolerable rate of increase in its low income, three components were considered: (1) desired increase in income, (2) possible maximum contribution from domestic financial reserves and current savings, (3) extent of probable foreign aid.

The Indian goal had been to double per capita income in 15 years. Reducing the period to 5 years and adapting the potentialities to Afghanistan's smaller stock of capital, the mission set as a reasonable goal an increase of about 25 percent in total product. On the basis of an estimated value of the Afghan gross national product of about $252 million for 1948,[12] this would have been equivalent to adding $62 million a year by the end of the 5 plan years. Allowing for an expected population increase of half a million this would be a per capita increase of about 18 percent.[13]

No mission member had any notion as to the proportion of real capital to production for the various industrial and irrigation projects. Nor was it assumed that such capital-output ratios would be useful in calculating the minimum investment needed to reach the target. The Bombay plan, using statistics for cotton textile, cement, and powerplants, had arrived at an average capital-output ratio of 2.4 to 1. In agriculture the capital-output ratio was 0.83 to 1. While these ratios seemed low, they were used as benchmarks for calculating what the adviser considered a reasonable investment target for the Afghan 5-year plan. Relying on the Minister's conviction that the total investment program ought to be equally divided between industry and agriculture, an average ratio of capital to output of between 1.5 and 2 to 1 was used to arrive at a defensible upper limit for total investments. On the basis of this rough benchmark the adviser recommended that the 5-year investment program not exceed $120 million. His advice was accepted.

In setting this benchmark the fact was overlooked that the Indian plan contemplated a far greater overall investment in relation to income than did the Afghan. The Bombay plan counted on simul-

[11] A Plan of Economic Development for India (London and New York: Penguin Books, 1944). This plan had tied the overall investment outlay to minimum national income and consumption targets and had spelled out priorities among alternative investments in terms of their contribution to the targets.

[12] Based on a very low estimate of the Minister's: $252 million, equivalent to $21 per capita. A United Nations expert put it at $720 million for 1951, equivalent to $60 per capita. If the percentage of the gross product paid to the Government in 1948 is assumed to be 7 percent (comparable to the percentage in Pakistan), the gross product itself would be $320 million, or about $27 per capita.

[13] This target was high; it was twice the annual income increase in 11 of the least industrialized countries, including Japan, which had gone through a period of growth from 1924 to 1935. Their aggregate income rose by about 16 percent, or 2 percent a year. See Stephen Raushenbush, People, Food, Machines (Washington: Public Affairs Institute, 1950), p. 79.

taneous advance on all fronts, including health, education, and other social services, which would tend to keep the capital-output ratio in an individual project lower than in a less comprehensive development program like Afghanistan's.

The revised 5-year plan set $118 million as the total cost, with $78.3 million in dollar exchange needed. (See table 1.) Although the revised program seemed to meet overall targets, the result was an ambitious projection of future income—because of the assumed low capital-output ratio. The net increment in annual production (less the cost of raw materials and power) was estimated at $60 million: Irrigation, $32.4 million; coal mining, $0.6; telecommunication, $1.5 industrial projects, $22.1, transportation, $1.5, hydroelectric power, $1.9.[14]

Supported by M-K, the adviser vainly urged an allowance for the cost of social services and auxiliary facilities necessary for realizing the fullest benefits from the plan. Furthermore, in an economy with little skilled manpower and many resources tied up in production for subsistence, not cash, the additional burden might be expected to require more foreign technical assistance and possibly more foreign credit.

The complexity of preparing for this multiproject expansion on a narrow economic base was not fully appreciated. The adviser's doubt as to whether—

> * * * the projected rate of development takes proper account of the extent to which * * * resources * * * and managerial ability could be made available, and whether it protects the country's economy against excessive strain,[15]

was answered by the Minister this way:

> The work done by Morrison-Knudsen in cooperation with the Afghan Government is ample proof that the organizational requisities for carrying out the projects which are part of the 5 year program are given.[16]

Since the answer was little more than an expression of faith, M-K and the adviser resigned themselves to the likelihood that administrative personnel would have to be imported under a large enough foreign credit.

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[14] How ambitious this plan was became evident only after construction started. In 1948, not even M-K's president appeared surprised at the low capital-output ratios.
[15] Adviser's notes, Washington, November 1948.
[16] Economic Report, p. 122.

TABLE 1.—*Costs of original and revised 5-year plans*

[In millions of dollars]

	Original 5-year plan		Revised 5-year plan	
	Total cost	Foreign exchange cost	Total cost	Dollar cost [1]
Irrigation	31.2	21.0	44.3	28.7
Helmand	23.6	15.5	23.0	18.4
Arghandab	7.6	5.5	20.7	8.3
Kataghan			10.6	2.0
Industry:				
Cotton ginning, seed, soap, sugar (Kataghan)			3.7	1.1
Textiles	30.0	25.0	25.7	18.2
Cement and brick	6.1	4.3	5.6	4.5
Foundry and machine shop			1.2	1.0
Coal and other mining	4.0	3.5	7.0	5.5
Hydroelectric power			9.0	5.0
Roadbuilding	7.0	6.0	3.5	2.5
Transportation services				
Telecommunications	1.7	1.5	14.0	7.8
Engineering surveys	4.0	4.0	4.0	4.0
Total	84.0	65.3	118.0	78.3

[1] Not including about $4 million in rupees for expenditures in Pakistan which are included in second column of "Original Plan."

Source: Economic Report, pp. 15, 17, 94, 99.

Gaging domestic financial needs and resources

The public works projects originally required domestic investment funds equaling $39.4 million. The Government had assumed an interest and amortization burden for internal development loans from the state bank (1946–48) requiring about $7.6 million during the plan period.[17] So the total needed was $47 million.

Although the development budget received 85 percent of the income tax and all proceeds of the excise taxes on sugar, tea, and matches, yielding the equivalent of about $6 million in 1948, the revenue seemed inadequate to finance $47 million over 5 years, especially when it was realized that the private-business part of the plan would require another $48.7 million, also to be mobilized internally. The crux of the question was how much local currency could be squeezed out of the economy for both public and private investment without undue inflation. Allocation between public and private seemed secondary.

Basic economic principles indicated that an investment program of this size was out of proportion to the national financial reserves, current voluntary savings, and reduction of consumers' spendable income through new and increased taxes. Relying on an assumed maximum savings rate of 6 percent of the national income (which the Bombay group considered feasible in India), the Afghan mission considered that $75 million was the maximum realizable within Afghanistan over the plan period. A larger amount could be defended if the Government were willing to create money by borrowing more from the state bank, at the same time adopting stringent control policies to minimize inflationary effects.[18]

[17] The regular budget for the fiscal year ending March 1948 had ended with new state bank loans to the Government of $8.7 million to help pay for expenditures of $28 million.

[18] There was no recognition of the problem created by the need of workers on investment projects for food and other necessities formerly available to them on the farms or the steppes. Unless the communities from which the workers were to be drawn (and perhaps other productive communities, too) were to be taxed or food requisitioned, new productive capacity would have to be created to feed the workers at their new places of employment—necessitating additional outlays by Government or producers.

The adviser was not successful in his use of standard arguments against inflationary financing of economic development. Afghan farmers and workers, he was told, would adhere to their age-old custom of hoarding any new cash income. Despite the recent price rise, the Minister believed that much of the new money would not be translated into additional purchasing power during the plan period. But he did agree to insert the following pledge in the Economic Report (p. 125):

> Should * * * a gap develop between the volume of effective spending money in the hands of the people and the goods available, the Government is prepared to * * * (*a*) continue their rationing system and price control; (*b*) wherever practicable, concentrate production effort in areas where increased purchasing power will be felt most, i. e., foodstuffs, cotton piece goods; (*c*) increase Government revenue through better enforcement of existing tax laws and increased excise taxes; (*d*) use Government influence to restrict commercial bank credit.

Impressed by the performance of imported machinery once it was able to get going, American engineers and Afghan technicians had advocated that, in the initial period, up to 70 percent of the total project cost be spent on foreign equipment and relatively little on local labor, however cheap. The Minister's consent to M-K's recommendation reduced local currency requirements for public projects in the $118 million plan from an original $47 to $36 million. Moreover, in a gesture of Government-business cooperation, the Minister proposed that the private groups, originally scheduled to buy all their exchange requirements from the Government, be granted (for part of their needs) a Government dollar credit from funds advanced by the bank. This would reduce local currency needs for private projects during the plan period from $48.7 to $27 million, bringing the total to $63 million, safely within the benchmark of 6 percent of the national income.

The reduced local currency needs did not require additional state bank credits, but the Government needed to build up a current reserve. It promised to increase income and excise taxes and collect 27 percent more in annual revenues from these sources in 1949–53 than it had in 1947–48. It was apparent, however, that if the loan did not materialize on the scale planned, the Government would be pressed to find other local revenues. In that case a drastic rise in income-tax rates or a stretching out of the planned investment schedule seemed inevitable.

However, the Economic Report seemed to provide for adequate internal finance of the Government's needs during the construction period. For the repayment period, which the mission hoped would not begin until the eighth year (1956), the Minister proposed further increases in revenues, optimistically expected from higher tax rates and a larger volume of business. The appendix to the Economic Report showed a doubling of the tax revenues assigned to the development budget—$6.7 million for 1950 to $14.5 million for 1967.

The private sector's financial resources seemed more ample than those available to public bodies. The Textile Co.'s accumulated reserves and surplus, for example, were sufficient to finance over a third of the new textile plant. More important still was the confidence placed in new capital stock issues by all four companies involved in the Minister's plans. The amount expected from merchants and landowners in this way was equivalent to 58 percent of total private funds needed. The rest was to come from bank credits, future profits, and depreciation reserves. The group around the

Minister did not expect any trouble in mopping up savings (or hoards) and profits at a rate adequate to meet the needs of the investment program.[19]

III. Selecting Projects

The bank's preference for "productive" lending, in contrast to consumption loans, made it necessary to correlate certain factors over the proposed repayment period: (*a*) The rate of increase in productive capacity with (*b*) the resulting improvement in the trade balance, and (*c*) the amounts of repayment proposed. The bank expected an economic justification for each project selected by the mission.

Textiles, cement, brick

A strong case was made for quick returns on textile, cement, and brick projects—all of which the Minister controlled, or hoped to, through investments by Bank-e-Millie. For the cotton-mill expansion rosy figures were presented, which had to be adjusted to the higher cost of American equipment and personnel required under terms of the hoped-for loan.[20] But the investment's size was adequately supported by data on domestic demand and there seemed little doubt that the $18.2 million needed in foreign exchange could be recovered from reduced imports within 5 years after the mills were built.[21] So they were included in the revised plan.

The new cottonseed-processing plants for soap and oil were also to be part of a limited industrialization program substituting processed agricultural materials and manufactured articles for expensive imports. Since the new textile plants would require 7,500 tons of raw cotton a year (at double-shift rates of operation) it was easy to defend the expansion of ginning and cottonseed-processing facilities. Peak production, in 1945, had not exceeded half capacity (2,500 tons of edible oil, 750 tons of soap annually), but the expansion of cotton cultivation justified the doubling of the existing capacity. Less than one-third of the $3.7 million needed would be spent on foreign equipment.

Despite the crying need for strong and durable domestic building materials, Afghanistan still had no cement or modern brick plant. Although coal mining was not being expanded fast enough to assure a supply for starting brick and cement production, the Minister included a "dry process" plant, producing 45,000 tons of cement a year, costing $4.6 million (3.8 million in dollars). High freight would make cement cost $30 a ton, but it would still successfully compete with Indian or Pakistan cement, thereby saving the country $380,000 in building cost and nearly $1 million a year in foreign exchange, if the plant operated at full capacity.[22] A structural clay-brick and tile

[19] The bank's 1952 examination of Afghan finances confirmed that there was no scarcity of local capital. Though delayed by 2 years, the private investment program was found operating in high gear.

[20] In the year ending March 21, 1948, on a $9.2 million paid-in capital the company had earned $1.5 million before taxes and dividends. The 2,000 new looms would quadruple local cloth production and gradually replace about 85 percent of the annual $20 million worth of imported Indian cloth behind a 25- to 50-percent duty. First foreign-exchange savings, expected in the sixth year after building started, were to reach over $5 million a year. In the sixth year the company was expected to gross $5.6 million on its increased capital of $22.2 million, despite lower prices. The physical details of the new mills and their power plants had been surveyed by Bombay's Associated Consulting Engineers in July 1948.

[21] The substitution of domestic production for imports from India and Japan was considered possible only behind a 25- to 50-percent ad valorem tariff, at least as long as production costs were to be burdened with an abnormal depreciation reserve to provide capital for future expansion. Moreover, the import duties were badly needed for the Government budget.

[22] Based on M-K's Report on Proposed Cement Factory Near Kabul, Afghanistan, San Francisco, June 1948 (mimeo).

factory would replace both weak, handmade, sun-baked domestic material and the expensive imported products. An investment of only $1 million would save $700,000 annually in building cost and at least that much in exchange.[23] So a dollar requirement of $850,000 was included.

Coal and power

It was recognized that all this expansion required a greater supply of coal and power. In 2 coal seams north of Kabul 150 miners dug up 8,000 tons a year with pickaxes. To double that production in 2 years and quadruple it in 5, the Government's American mining engineer had recommended 5 new access tunnels and improvements, which included mining equipment, road improvements, and a year-round mining community.

A miscellany of power schemes had been launched by private business but, despite the abundance of river water in the mountainous areas, total installed hydroelectric capacity did not exceed 12,000 kilowatts, producing 38 million kilowatt-hours in 1948. The building and operation of all hydroelectric plants was controlled by one company (under Government regulation) in which Minister Madjid had a strong hand because Bank-e-Millie helped to finance it. In 1948 he had contracted with a German firm to survey and lay out the site of a 24,000-kilowatt plant at Sarobie to provide Kabul with $2 million of power a year. ' After reserving the right to order German equipment and engineering, the Minister included the construction in the plan for American financing. So important did the Minister consider the Sarobie project for Kabul power (perhaps because of its expected net return of 11.4 percent on invested capital) that his bank pledged a loan for half the capital cost. A cost-plus contract with M-K, assuming bank support, was ready when the Economic Report was handed in.[24] Five million dollars were needed out of a total $9 million cost.

Roads and transportation services

Sales of local produce had always suffered from inadequate and expensive transportation facilities, unless they were staple goods with points of origin and destinations along international caravan routes. Improvement of the 3,600 miles of "roads" had been featured in Government programs for more than 65 years, yet few of them could resist spring floods, storms, and heavy traffic. Even bridges and drainage structures built with the help of foreign engineers were inadequate.

The road-building program was the core of the 1946 M-K contract and its proposed sequel. Yet by December 1948 only the 75-mile road from Kandahar to Spin-Baldak, linking the fruit-growing Arghandab Valley with the nearest Pakistan rail terminal, was actually being built. Completion of the three other major links had been postponed[25] because of the high construction cost—an estimated $26.4 million.

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[23] Based on M-K's Report on Proposed Brick and Tile Factory Near Kabul, San Francisco, June 1948 (mimeo).

[24] The cost estimates included three additional hydroelectric stations serving the new textile plant. Irrigation projects were to be designed so that power stations could be added to meet the demand in southwestern areas as land was reclaimed.

[25] Girishk-Kandahar, 73 miles, connecting Kandahar with the Helmand Valley; Kabul-Torkham, 151 miles, the main link with the Khyber Pass and through it with the outside world, along an ancient trading route; Kabul-Kandahar, 315 miles, linking the two most important business centers in the country.

Eloquently M-K demonstrated attractive "payout" schedules for the roads—from 4 to 14 years. But Minister Madjid confined his proposal for roads to completing surveys, making minor repairs, and improving maintenance, the latter at a cost of only $750,000 a year to the Government. No argument on the part of M-K could convince him that without continuous investment in all-weather roads the country would remain an "economic archipelago," deprived of the advantages of labor divided between the various "islands." Nor could he be convinced that poorly constructed roads would increase the cost of all construction projects for which equipment, men, and materials had to be moved on wheels. The deferment of the road construction projects not only would postpone important savings in initial investment and subsequent maintenance, but also would sacrifice part of the increased foreign exchange income through high spoilage rates and freight cost.

Minister Madjid did face up to the fact that new mills and half a million acres of new land could not be served by camel, donkey, and man, which in 1948 still carried half the nation's transport load. For 1,100 new trucks and 50 buses $2.5 million was budgeted, and $1 million in local currency for repair and garage facilities. The Minister believed these vehicles would add annual haulage equivalent to 15 million ton-miles (based on the carrying capacity of M-K operated trucks).

Kataghan Province: Canal building and drainage

Little attention had been given to the potentialities of the northern provinces, primarily Kataghan. (See map.) Yet fertile soil, abundant water, American cotton seeds, the ingenuity of local farmers, and Government seed and fertilizer experiment stations had notably increased production there during the thirties. Private business administration had been efficient and the Bank-e-Millie-owned cotton and sugar companies were prepared to expand and sign long-term buying contracts with the farmers.

The proposed undertakings were relatively simple and cheap: drain wooded areas, build irrigation canals for cleared and drained land, repair roads and bridges, spray malarial areas with DDT, and do the first plowing of sugar and cotton land with 72 tractors to be furnished to 40,000 settlers moved in from crowded eastern valleys and the nomad's grazing areas.

The Department of Agriculture was to carry on most of the developmental and extension work. The cotton and sugar companies were to retain monopolies on purchasing, processing, and selling cotton and sugar, the Government maintaining its control of prices and foreign-exchange earnings. Settlers could dispose freely of vegetables, fruit, silk, flax, and hemp crops.[26] The adviser estimated the net increment of annual production at the processing level as equivalent to $9 million, as compared with a $14.3 million total investment cost (including the cost of expanded processing facilities). Only $3.1 million was needed in foreign exchange for equipment and experts. This indicated a favorable capital-output ratio of 1.6 to 1. Most of the new value would go to the farmers since the companies, thanks to Madjid's prodding, had agreed to limit their profits and capital sav-

[26] The following production goals were set for the end of a 5-year development period: cotton from 3,000 tons to 17,000 tons, sugar from 4,000 to 14,000, cotton seeds from 6,000 to 40,000, edible oils from 600 to 4,500, soap from 200 to 1,500, oil cake and meal from 2,000 to 17,600.

ings to normal rates. A relatively small agricultural investment would provide opportunities for underemployed nomads opening idle land and would expand processing industries.

The net gain in foreign exchange also would be substantial, since the companies expected to export almost all the additional cotton to India and Europe. Even allowing for increased domestic consumption of cotton, exchange earnings of $8.2 million a year were expected within 5 years, despite an expected 33-percent drop in the 1948 cotton price. Savings of $2.5 million annually from the substitution of domestic sugar for 9,000 tons of imported sugar a year and $500,000 annually from reduced soap and oil imports would bring total exchange gains to $11.2 million a year—compared with the dollar investment of $3.1 million required.

Minister Madjid's enthusiastic endorsement of the Kataghan irrigation project, along with the industrial projects in the region, in part reflected his business interests. Aid for Kataghan would strengthen Bank-e-Millie's financial hold on northern resources and its overall industrial position. The Government's share in the benefits, and those of Afghans living elsewhere, could be secured through increased tax revenues.

The Arghandab Dam

Southwest of Kandahar, the Arghandab Valley's fruits had long attracted Indian buyers; in 1939 they accounted for more than a fourth of Afghanistan's gross foreign-trade earnings. But the 1946–47 drought killed many vines and fruit trees and left many canals dry. Plans had been made for a combination storage and power dam in the upper reaches of the Arghandab River (which flows into the Helmand—see map) to store and regulate water and to raise underground water. But not until September 1947 did the Minister of Public Works authorize M-K engineering field surveys of the soils and the farmers' water needs. Adding 315,000 acre-feet of stored water to the natural river flow in the low-water season was expected to meet the full water requirements of 4.3 acre-feet of water a year for 120,000 acres. The remaining difficulty was the 40-percent water loss due to evaporation and seepage encountered in the canals.

The mission decided to concentrate on the dam and a central water-control mechanism, allowing for minimum canal repairs only. The reservoir cost was estimated at nearly $9.7 million with an additional $1 million for canal repairs, land leveling, and road building. M-K's agronomist, with 2 years' experience in the area, had found most of the land good and the crops varied. After full development, he expected yields per acre to increase more than 50 percent and farm prices to stay firm—despite the supply increase—in view of a growing demand. The capital-output ratio (1.2 to 1) was more favorable than that estimated for the Kataghan project.

The engineers estimated additional gross receipts by farmers at nearly $74 an acre ($59 for 100,000 acres of old land, $148 for 20,000 acres of new land). A doubling of exportable crops would raise proceeds in foreign exchange by about $12.5 million a year. On this basis M-K estimated that foreign exchange equivalent to $1.50 would be earned annually on every $1 of foreign-exchange invested.

But the engineers' calculations of the increase in gross crop value struck the mission as exaggerated. The optimistic return ratio ap-

peared to ignore the additional cost the farmer or the Government had to meet for repairing and building distribution canals. The engineers assumed that all capital could be obtained from current revenue instead of from loans, and hence had added no amortization charge to the annual cost. Finally, some allowance for a price drop at home and abroad after the doubling of production seemed inevitable, especially in view of the inflationary rises in 1948.

The Minister of National Economy, however, rationalized the sustained price level by relying on increased demand in Pakistan and India because of population increases and more rigid enforcement of taboos on meat eating. But the adviser reduced the expected farm income estimate to take into account reduced prices and expenditures on improvements by the farmer. Partly by relying on similar United States Bureau of Reclamation estimates, he arrived at a net aggregate annual income of $950,000 ($415,000 after amortization, or 3.9 percent on the proposed investment) with which Arghandab farmers could improve their standard of living and make further investments. After investing $8.3 million of foreign exchange in construction, the nation would earn annually $6.4 million in foreign exchange (instead of the $12.5 million calculated by M-K). Thus, cast in more conservative terms, the projected investment was included in the economic report as a "bankable" project.[27]

Harnessing the Helmand: Dam and canals

Along the 400 miles of the Helmand River through Afghanistan's arid southwest lie 500,000 acres of good soil, much of it deep silty loam. In 1946 60 percent lay idle or furnished the lowest grade of grazing; 40 percent, dependent on the Helmand's erratic water level, produced wheat and barley. The bottom soils, like those of the Arghandab, were fertile alluvial deposits although—

> * * * soil fertility in places has been impaired by centuries of cultivation without * * * commercial fertilizers and largely without crop rotation * * * In (other) areas a high water table exists and this has caused a surface accumulation of salts.[28]

Over the centuries hand-built canals and weirs had followed the shifting river course. Underground water-collection tunnels supplemented river water. But the sorry state of irrigation structures, along with the absence of roads, had led to the deterioration of once-flourishing cultivation.

The Government had made efforts to rebuild the Boghra Canal (see map) to reclaim about 100,000 acres of tablelands. Prewar Japanese work was followed by M-K's building of a diversion dam near Girishk and the first 30 kilometers of the Boghra Canal. But an April 1948 survey had revealed that these tablelands consisted chiefly of shallow soils over dense gravelly subsoils. Less fertile than the bottomlands, the tablelands held less moisture and were either poorly drained and saline or cut into by water-wasting gullies (Sheila).

By fall of 1948 the Government had mixed feelings about further Helmand development. More reconnaissance work had been carried out in the Boghra area, and new land could come into production sooner there than elsewhere. Land reclaimed there would not be affected by the cutting and shifting of the river course. But the

[27] A second phase covering power development, wells to irrigate 30,000 more dry acres, and additional leveling and road building, to cost another $5.6 million, was postponed for future consideration.
[28] F. O. Youngs, Possibilities of Agricultural Development in the Helmand Valley, April 10, 1948.

bottomlands promised richer returns in the long run. And the diversion of water to the tablelands during the low-water season would take water away from bottomlands downstream unless an upstream reservoir stored floodwater. While prestige considerations suggested completion of the limited Boghra project, economic wisdom seemed to advise an enlargement of its scope before continuation. The growing shortage of exchange forced a decision.

M-K advocated an integrated valley development, including a major reservoir dam upstream at Kajakai, and completed field surveys for the dam by September 1948.[29] For a comprehensive project M-K was reluctant to count on more than 400,000 acres for irrigation and settlement until a thorough survey of the entire valley had been made. But the Afghans saw no need for such a survey. M-K and the mission concluded that even a 20 percent margin of error in estimating the acreage or water supply could not detract from the project's intrinsic value.

A comprehensive project, based on intelligent guesses by M-K and the mission was estimated to cost $63.7 million, with $53.7 million of it in foreign exchange. (See table 2.)

Some doubts surrounded the potential income from which to amortize the investment over a reasonable period of time. Precision in estimating this did not initially seem feasible nor was it considered essential by M-K's engineers:

> * * * these developments are almost necessities, and a necessity is beyond price, and therefore properly not to be considered as a subject of economic study. The value of an operation to a person suffering from acute appendicitis is an illustration; the value of food to a starving man is another, and in the Afghan case, when this simile is employed, we hit perilously close to the mark.[30]

Yet since foreign exchange had to be borrowed, economic forecasts had to be made to permit the bank to apply its loan criteria to the project.

M-K's initial projection of crop-value increases (with only slight reductions in crop prices) reflected a capital-output ratio of 1.8 to 1. It made no allowance for new costs to the farmers, including the increased tax burden. M-K believed that even if all adverse factors were taken into account, the deduction from the estimated crop income would be small compared with the favorable ratio of benefits to costs.[31]

To counterbalance a possible overstatement of crop production and an understatement of charges, the benefit ratio was recalculated on another basis. It was assumed that all funds would be borrowed and that account must be taken not only of insurance and depreciation over 50 years, but also of a loan-repayment burden of 5 percent a year and interest charges of 4 percent a year. The project's total fixed charges thus came to $6 million a year, with operation and maintenance costs adding another $1.5 million.

Relying on M-K's earlier estimates of future benefits, the annual increased crop value was put at $27.6 million. To arrive at a more meaningful economic return rate on the capital invested (which could be compared with going return rates in the business sense), allowance

[29] Hydroelectric potentialities were ignored in the first recommendation because there was no available knowledge of the probable load. The mission included power in its integrated project only as a future potential.

[30] M-K, Report on the Development of the Helmand Valley, December 1947.

[31] In accordance with standard American reclamation-engineering practices, M-K relied on the ratio of gross crop increases to annual cost of interest, maintenance and repair, depreciation, and insurance. For the Helmand project this turned out 8:1. A ratio of net annual return on the investment cost, after deduction of all cost items plus the settler's own cost, might have been a more meaningful comparison for a government.

was made for normal deductions from gross farm income of farm-operating costs and living expenses.[32] The margin left after these deductions from income on new land was just large enough to pay for the annual fixed and maintenance charges on the $63.7 million construction. In fact the net margin was $765,000 a year, only 1.2 percent of the capital invested. (After repaying the loans, $3.2 million would be left over, a 5 percent return.) It was clear that an error of 20 percent (which had to be allowed for in cost or crop-value estimates) could make the project uneconomic during the repayment period. Unless the old settlers were taxed or the burden of borrowing money reduced, the project would leave little room for improving the settlers' lot.

The adviser's warnings about the project's narrow economic base were dismissed as fanciful and the Minister chose to let M-K's gross return rate speak for itself. So the United States Government was asked to accept the prediction that a $63.7 million investment could bring in an—

* * * aggregate crop-value increment * * * in excess of $39 million per year * * * which would be six times the annual cost of the long-term project.[33]

In calculating the foreign-exchange benefits of the Helmand project the mission felt that to be financially sound the project should increase the percentage of crop exports from the 1947–48 2 percent of valley production to 20 percent of the increased crop production. M-K's agronomist first estimated an exportable surplus of $5.5 million annually, roughly equivalent to 23 percent of the total crop value.[34] The Minister, believing a greater degree of diversification could be expected, in order to produce more exportable fruit and cotton, requested M-K to recalculate crop values on the assumption that 10 percent of the acreage would be in cotton, 10 percent in fruit, and the grain acreage correspondingly reduced. After adjustment for spoilage and other losses the final estimate for the gain in exchange to be expected in the late fifties came to $23.8 million annually, or $50 per acre.

TABLE 2.—*Helmand Valley development cost*

[In millions of dollars]

Project parts	Comprehensive valley project	Phase I only
Kajakai Dam and Reservoir	11.0	11.0
Diversion dams	8.8	----
Canals and headworks	14.2	----
Boghra diversion dam and canal	(1)	[2] 7.2
Seraj Canal and related works	(1)	4.8
Land leveling	7.1	(1)
Local truck roads	12.6	(1)
Produce storage and processing works	10.0	----
Total cost	63.7	23.0
Of which foreign exchange cost	53.7	18.4

[1] Applicable amounts included in preceding 2 items in this column.
[2] Completion of the Boghra diversion dam and canal headworks (cost: $2.5 million) was assumed before phase I work could begin, hence not included in phase I cost.

Source: Economic Report, p. 50; M-K, Kajakai Project and its Relation to the Development of the Helmand Valley, January 1949.

[32] These allowances, initially derived from data on Oregon reclamation projects, were confirmed later by M-K's agronomist.
[33] Economic Report, p. 40.
[34] J. W. Jordan, Economics of the Kajakai Dam, April 12, 1948. Exportable crops were valued at the price obtained by farmers.

Reducing the scope of the Helmand project

The project's very size raised doubts among the Afghans about their Government's ability to raise the necessary foreign exchange and about such concentration of resources in one area. Some officials compared the Helmand lands with the Kataghan lands, available for irrigation at little cost. On the other hand, the attractive engineering features (absent in the Kataghan) and the need to spread economic development to one of the least developed regions of the country had a strong appeal. Efforts to single out individual parts of the project for priority in financing failed because data to compare the relative potentialities were not available, nor could full benefits be expected from a single part until the whole was completed. The mission finally solved the dilemma by dividing the Helmand project in two phases.

The Boghra Canal was included in phase I, despite the recommendation of M–K's agronomist that it be deferred "until it is determined that the water supply is sufficient to serve both the (lower) Helmand Valley and the Boghra project." [35] After all, the Girishk diversion dam and the canal intake works were already more than half finished. But the calculation of economic benefits from a single canal project was particularly difficult. Without a reservoir the large diversion needed would withdraw much water from other areas. But without the maximum use of water in the Boghra area, the investment there could not be fruitful. So the mission was forced to present the Boghra benefits as directly dependent on the building of a reservoir.[36] Again the engineers excluded farmsite costs from the Boghra cost estimates and assumed that no investment funds would be loaned so that settlers would not have to pay interest or repay capital. The construction cost for the Boghra was estimated at $7.2 million above the $2.5 million already spent. One year's gross receipts after the project area's development were to be almost equal to the capital cost.

A more realistic economic examination revealed a less promising future. Because much of the land was marginal, it seemed to the adviser that no more than 15 percent of gross crop receipts would be available for fixed charges leaving a margin of 1 to 1½ percent on the total investment. But this return would not be available until crop assortments had been drastically changed and tree crops had matured. If the optimistic yield expectation of M-K's agronomist were reduced by a third (which appeared reasonable), the project could not pay for itself. But these more realistic return estimates were not accepted and the Economic Report said (p. 47):

> With benefits equal to almost 14 times the annual cost, the Boghra project is clearly one of the most profitable parts of the Helmand Valley development program.

Also included in phase I was the Kajakai Dam since no individual project area could fully exploit its resources without an increased and regulated water supply. In addition, "conceivably some profits from a steady water supply could accrue to the whole valley if the dam alone were built." [37]

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[35] Y. O. Youngs, op. cit.

[36] No deduction from the Boghra project's benefits was made on account of reduction of irrigation water and crop values in other areas. On this basis the incremental crop value assigned to the 165,000 acres—fully irrigated—was $8.5 million a year, compared with 1948 receipts of $1.2 million.

[37] Economic Report, p. 40. In that case farmers would build and maintain diversion dams and canals by hand. J. W. Jordan subsequently observed that this was wasteful, since the cost of maintaining many small capacity ditches would be more expensive in local manpower than would the maintaining of a more permanent structure. Also, a large-capacity system would have more flexibility.

But the mission found it difficult to determine how much the improved water supply would boost the valley's production even if no other diversion structures or canals were built. The mission finally figured 10 percent, or $4 an acre, additional farm income from the dam alone, or $750,000 a year. Comparing these small benefits with the cost of the dam alone revealed the correctness of the engineers' judgment: the dam was hardly worth building unless other local irrigation structures rapidly expanded cropped acreage, and changes in crops boosted yield values. Repayment, interest, depreciation, and cost of the dam's maintenance and operation exceeded the expected increased crop income by $2.8 million a year. Since not even the overstated benefits from the Boghra canal were sufficient to absorb this loss, minor low-cost irrigation projects in the Seraj-Girishk areas, to receive Helmand water above the Boghra diversion dam, were also included in phase I. (See table 2.)

M-K's agronomist computed the incremental gross crop values for all phase I projects on the basis of rather optimistic future crop yields: $95 per acre on 97,000 acres of new good land, $49 per acre on 48,000 acres of old land, and $29 per acre on 75,000 acres of new marginal land. The aggregate increase in crop values came to $14.3 million if the gains accruing to unimproved cultivated land downstream ($4 an acre) were included. When corrected for an expected drop in farm produce prices from the inflationary level of 1948, the figure became $10.7 million.

Without considering the repayment burden or the farm-site development cost, M-K's engineers concluded that after phase I was completed the annual crop would be worth more than 8 times the annual cost and the capital-output ratio was given as 1.8 to 1.

But since some amortization would have to be carried, this calculation was misleading. To the mission it appeared reasonable to burden the irrigation projects with the repayment of the capital outlay and to prorate the amortization of the reservoir dam according to the proportion of the acreage under cultivation when phase I was finished to total cultivable acreage. These cost items boosted the annual carrying charges from $1.7 to $2.3 million. In addition, it had to be expected that the farmers (or the future Helmand Valley Authority) would spend 25 percent of gross income for annual local improvement and development and that 50 percent would go for family living and operating costs. This left $0.8 million in annual net income out of the deflated gross of $10.7 million. So it seemed barely tenable to consider phase I projects as self-liquidating since even during the amortization period a 3.1 percent net return on capital remained after all deductions.

The probable gain in foreign exchange expected from phase I projects, after allowing for a price deflation, was set at $5.4 million a year. The method of computation was the same as described above for the comprehensive Helmand project, applied to a smaller acreage.

In terms of foreign exchange returns, the projects singled out for priority in financing by the United States Government compared as follows:

	Return	Investment
Textiles	$5 million a year [1]	$18.2 million.
Cement	$1 million a year	$4.5 million.
Brick	$0.7 million a year	
Coal	Absorbed in other projects	$4.0 million.
Power		$5.0 million.
Kataghan	$11.2 million a year	$3.1 million.
Arghandab	$6.4 million a year	$8.3 million.
Helmand—phase I	$5.4 million a year	$18.4 million.

[1] $11.9 million a year after 1958.

IV. Determining the Amount of Financial Aid

In assembling the package of desirable projects, the mission's criteria were twofold: (1) Afghanistan's physical, financial, and managerial resources, and (2) the willingness of foreign engineers to undertake the projects on which their advice was sought. The availability of external financial aid, after allowance for a contribution from the official exchange holdings or expected net exchange earnings, was no criterion. The result was a total dollar-exchange requirement of $78.3 million, or 66 percent of the total cost of the plan. (See table 1, above.) On the basis of M-K's engineering and construction capacity the following 5-year schedule for expenditures in dollars was mapped (in thousands of dollars):

1st year	11,568
2d year	23,825
3d year	21,442
4th year	14,446
5th year	7,038
Total	78,319

An additional $4 million was to be spent for cement and petroleum products from Pakistan.

Estimating Afghan contribution to dollar cost of plan

M-K and the Government both viewed dollars already spent by the Afghans on the various projects under the 1946 contract with the American firm as a sufficient contribution to the new projects—$17 million by January 1949. In informal contacts with United States Government officials it was established, however, that a new contribution from Afghan exchange reserves would help in the sympathetic consideration of the loan request. The Minister finally conceded that a further contribution was feasible. But its size had to be determined.

The easiest way to estimate the amount that could be spared was to compute how much foreign currency the state bank needed to retain a reasonable working balance for preserving a normal flow of imports if crops at home or sales abroad were poor. The official reserves in all foreign currencies toward the end of 1948 barely exceeded $4 million (not counting the holdings of Bank-e-Millie), an amount insufficient to back up a normal import volume of about $55 million a year. An effort to consider release of part of the $49 million gold and silver reserve providing a currency cover of better than 80 percent was blocked by the conservative gold-conscious attitude toward money.

The only source of exchange suitable for the purpose was the karakul stock, estimated at $31 million at the time, and the expected increase in exports of raw cotton during the plan period.[38] Accepting the official forecast of additional exports during the entire plan period of $31.2 million, the adviser argued for the recognition of the need for larger imports, too.

The import effect of investment

In determining the soundness of their investment program the Afghans had failed to consider the impact on domestic purchasing power and hence on demand for imports. While data for a typical family budget were not available, a moderate increase in import requirements arising out of accelerated investment activities should have been recognized, especially since all consumer durables and 80 percent of the soft goods were being imported. Minister Madjid conceded that, after the beginning of the development program, the demand of consumers for imported articles could no longer be held to the 1947 average—$4 per capita. He agreed to larger exchange allocations for petroleum products, staple cotton goods, tools, repair parts, building materials—auxiliary requirements of the development program not included in the exchange cost of the projects. Had statistical detail permitted it, calculation of the Afghan import propensity would have been the answer, at least for estimating the order of magnitude of the additional demand for imports.

Somehow this factor had to be taken into account, not only for the sake of the United States Government but for the sake of the Afghan people, particularly the new settlers who performed in a way a public service in opening up new land and could therefore claim a larger share in consumption goods and imports. Sooner or later surrounding areas and the entire country would be affected by the income-creating effect of the investment program. After much guessing the mission finally settled on 3 percent of each year's imports as the allowable additional amount importers could bring in the following year.

Therefore, allowing for a compounded effect, the additional exchange needs for the investment period was put at $10.7 million.[39]

This deduction from exchange availabilities did not satisfy the Minister, however; he suggested that conservation of exchange due to greater substitution of domestic products for imports should be taken into account. Output of the new sugar, cement, soap plants, and of increased cottage-industry capacity would replace about $4.9 million of imports during the plan period. Accordingly, the net change in the trade balance over the 5 years was estimated as follows:

[38] 1946 export proceeds from cotton were $2.1 million. The Minister predicted a boost to $2.8 million for 1949 and a jump to $9 million for 1953. The exclusive export outlet was the Northern Cotton Co. which he controlled.

[39] Economic Report, pp. 111–113. Learning that the bank would not make loans to meet the impact effect of investment projects, the mission decided to confine the loan request to direct project cost. The bearing of increased imports on repayment ability was considered by the mission in defending the amount of the loan requested.

[In millions of dollars]

	1949	1950	1951	1952	1953	Total
Increased exports	2.8	4.6	7.3	7.3	9.2	31.2
Increased imports	2.0	2.1	2.1	2.2	2.3	10.7
Decreased imports	0	0	1.0	1.4	2.5	4.9
Net gain in foreign exchange	.8	2.5	6.2	6.5	9.4	25.4

No net change in other categories of foreign-exchange income or expenditures was expected.

In view of this the Afghan Government declared it would make a contribution in dollars of $23 million to the proposed projects, leaving $55 million for bank financing—70 percent of the total exchange requirements.[40]

Determining the ability to repay

To provide simplicity and some economic justification for a repayment proposal, annual surplus margins in the trade accounts were projected for 15 years after the completion of all projects, and annual interest and amortization payments compatible with these margins starting with the 7th and ending in the 15th year. The debt-service terms were those used by Da Afghanistan Bank which was lending the Government funds for economic development at 4 percent annual interest against amortization within 15 years, starting in the 7th year after disbursement. These repayment and interest obligations were then compared with the long-term trend of the trade balance.

Three kinds of long-run estimates had to be considered: (1) Export potentials for fruit, cotton, karakul skins, and wool, (2) domestic production substituting for imports, and (3) growing import requirements for which no substitutes could be anticipated. These projections yielded a bell-shaped trend curve in the net changes in the trade balance for the indicated 15-year period (table 3). Computing debt-service payments with a close fit to the trend of the trade balance left a margin of tolerance the adviser considered necessary in view of the Minister's extreme optimism with regard to export proceeds. Bound by the engineers' disbursement schedule of dollar expenditures the adviser worked out the pay-out schedule for the loan (table 4).

[40] In appraising the size of this contribution in relation to reserves accumulated as of December 1948 and the expected net increment during the plan period the mission had to keep in mind the expected interest burden—$6.4 million for the first 5 years.

TABLE 3.—*Projected changes in trade balance, 1954–67*

[In millions of dollars]

Year	Increased exports	Increased imports[1]	Decreased imports	Net change in trade balance over 1953	Year	Increased exports	Increased imports[1]	Decreased imports	Net change in trade balance over 1953
1954	10.5	14.0	7.8	4.3	1962	23.6	29.5	14.4	8.5
1955	10.9	15.0	7.8	3.7	1963	25.6	32.0	14.4	8.0
1956	11.5	16.0	10.2	5.7	1964	27.8	35.0	14.4	7.2
1957	15.6	18.0	10.2	7.8	1965	27.8	38.0	14.4	4.2
1958	16.6	20.0	10.2	6.8	1966	27.8	41.0	14.4	1.2
1959	17.6	22.0	14.4	10.0	1967	27.8	44.0	14.4	(1.8)
1960	19.6	24.5	14.4	9.5					
1961	21.6	27.0	14.4	9.0	Total				74.1

[1] Relying on Afghan assurances that subsequent 5-year investment programs of similar magnitude would be undertaken. It was assumed that imports for general consumption should be allowed to increase at the same rate (3 percent a year) as in the first 5-year period. Imports for investment requirements of subsequent programs also were included.

Source: Economic Report, pp. 109, 111, 113, 118.

TABLE 4.—*Approximate pay-out schedule, 1954–67*

[In millions of dollars]

Year	Amortization	Interest	Total	Year	Amortization	Interest	Total
1954	0.79	1.92	1.92	1962	6.11	0.77	6.88
1955	.79	1.92	2.71	1963	6.11	.57	6.68
1956	2.93	1.90	4.83	1964	5.33	.35	5.68
1957	4.79	1.80	6.59	1965	3.18	.17	3.35
1958	5.87	1.63	7.50	1966	1.32	.06	1.38
1959	6.11	1.42	7.53	1967	.24	.01	.25
1960	6.11	1.21	7.32				
1961	6.11	1.00	7.11	Total			69.72

Source: Economic Report, p. 117.

In this way the mission thought to prove that under a 9-year repayment schedule beginning in 1955 the improvement in the trade balance alone would allow the Government to repay $55 million. The mission warned the United States Government of the forecasts' assumptive character, assuring only the reasonableness of the general magnitude and the direction of the expected changes. Even if the forecasts were 20 percent too high, there would be enough improvement in the trade balance to warrant the loan. But the overriding condition of this expectation was that the investment program proposed be carried out in the time period indicated.

First formal loan request

The economic features of the bank's January 1949 loan of $100 million to Israel impressed the Afghans. The bank had not waited for details on all projects. Most of the funds were designed to finance projects forming part of an overall program for balanced economic development designed to create a self-sustaining economy. Of the $100 million authorized on January 19, 1949 only $35 million were specifically allocated to approved projects to "assist financing the purchase in the United States of equipment, materials, and services." The remaining $65 million were earmarked for dollar expenditures in connection with other projects which were to be selected and decided

upon pending the completion of more detailed investigation.[41] Previous loans to Turkey had been no less favorable.[42] The allocations for Turkish purchases of diesel shovels and paper mill machinery seemed comparable to the type of credits Afghanistan needed. Mexico's experience appeared similar in revealing the bank's attitude toward program commitments; since April 1947 Mexico had drawn on a $50 million loan authorization as specific plans at various intervals were approved by the bank.

The Afghans were tempted to request the same kind of overall program commitment, but bank representatives indicated that in Afghanistan's case the bank would prefer not to deal with the entire (development) program as a unit, but rather with individual projects. Nevertheless, on February 11, 1949 the Economic Report was officially submitted to the bank, presenting the revised 5-year economic plan. Of the $78.3 million in foreign exchange needed, the bank was requested to supply $55 million.

Allaying United States fears about balance of payments

Although funds for M-K work were running low and speed in obtaining foreign exchange was of the essence, a further delay was inevitable while the Economic Report was being examined by various United States Government agencies.

In March the Minister was requested to provide additional information on the adequacy of Afghan foreign-exchange reserves, the Government's control over its citizens' foreign-exchange earnings, and future government international obligations for expenditures other than imports.

In the previous year demand for goods in Afghanistan had expanded rapidly without a corresponding expansion of agricultural and industrial production. If the monetary expansion was not accompanied by a growing supply of domestic goods and if the anti-inflationary measures planned did not materialize, account would have to be taken of increasing pressure on official and private foreign-exchange reserves. Such was the reasoning of State Department officers.[43]

Since payments to M-K absorbed considerable foreign exchange State Department officials also wished assurance (1) that account had been taken of the development program's overall impact on the country's international financial position and (2) that, if necessary, drastic measures would be taken to economize on foreign exchange. Though the mission was anxious to meet State's request, particularly since the voice of the State Department representative on the bank's board of directors appeared crucial, it could only with difficulties project the country's balance of payments over the plan period. No matter how the figures for foreign trade and payments to foreign contractors were corrected to reflect future price and other changes, the estimates for the current accounts through 1953 showed a cumulative deficit of Afs. 222 million ($15.9 million). To deal with this,

[41] Export-Import Bank, Eighth Semi-Annual Report, January to June, 1949, p. 3; Press Release, January 19, 1949.

[42] In 1946 the bank set aside $25 million "for its participation in financing United States equipment, materials, and services for various * * * projects" and subsequently "established from time to time individual credits out of this earmarked fund." Export-Import Bank, Eighth Semi-Annual Report, January to June, 1949, p. 9; Ninth Semi-Annual Report, July to December, 1949, p. 20.

[43] Subsequent events confirmed their fears. The volume of production changed little in relation to new money issued by the Government since January 1949. The planned public bond sales did not materialize until October 1952 and public hoarding was apparently inadequate. Demand for imported goods increased and even the Ministry of Finance considered the share of imported consumption goods to total imports disproportionately large.

the mission pledged the government to a stricter control over unofficial foreign exchange holdings and unnecessary imports. But it put its strongest hopes on an excess of unaccounted-for sources of exchange over the uses to which such exchange will be put.[44] In other words, the Government conceded that invisible and highly doubtful exchange sources would have to be tapped in order to secure a balance in the accounts.

Yet, as for stricter exchange control, the Government found itself in a difficult position. Da Afghanistan Bank could keep an eye on only about 66 percent of all export proceeds, the remaining 34 percent being divided between nomadic tribes and organized smugglers. Effective exchange control applied only to the dollar export proceeds of which 80 percent had to be sold to the state bank at 40 to 50 percent below the free-market rate. Since dollar exports accounted for about half of total exports, about 75 percent of all export proceeds were sold at an exchange rate twice as high as the official one. The advantage of the Government's allocation of dollar earnings was that industrial investment needs, ruled essential by the Government, were met from the official exchange receipts at the official exchange rate, thereby providing private business with an incentive not only to buy investment goods but also not to use their own exchange earnings which fetched a higher price than did the exchange they could buy from the state bank. The system supported the free-exchange market—and made it legitimate.

Afghanistan's Ministry of Finance was convinced that a system of import controls, allocating foreign exchange in the national economic interest, would have to be instituted. But only a pledge from the Minister of National Economy, who had a large personal stake in exchange earning activities, could allay Washington's anxiety. He had given it, if in a veiled form:

> For the last several months Da Afghanistan Bank, in cooperation with the Government, has been considering measures which would either curb the demand for foreign exchange by curtailing imports, or correct the official exchange rate. A decision is expected shortly.[45]

A more strongly worded oral statement satisfied the State Department and a change in the exchange rate was proposed if no other means were available to correct a basic maladjustment in the balance of payments, e. g. to change the general trend of exports or imports or both.[46]

A more drastic adjustment would have been a change in allocation forcing more of the free proceeds into the coffers of the state bank. But to promise this required a stronger hand over business interests.

V. Rejection and Revision of the Loan Application

An unexpectedly long waiting period followed the filing of the Economic Report during which mission members maintained intermittent contact with bank and State Department officials. M-K operations had to be cut back for lack of dollars. Some Afghan officials

[44] This presumably could refer to either an excess of actual export sales values over declared values or smuggled exports or an excess of declared import values over actual payments for imports.

[45] Economic Report, p. 218.

[46] In the postwar period the Afghan exchange rate was adjusted only once, June 1948, when the official conversion rate to the dollar was adjusted from 13 to 14 afghanis. The industry incentive rate of 17.5 was introduced in March 1949. In September 1949 both were adjusted 20 percent, making the official rate 16.8 afghanis to the dollar and the industrial 21.0.

felt increasingly apprehensive about program delays while American officials slowly acquired the insight and information they thought necessary to make up their mind. It was hard for the Afghans to understand why the bank needed detailed studies to decide about this loan on principle. They did not realize how unknown the country was to the American officials concerned and how difficult was the consideration of a United States Government credit to one of the Soviet Union's neighbors, unwilling to take sides in the political East-West conflict.

Rejection of the first request

Late in May the Bank's Board of Directors acted on the recommendation of the bank's staff for sympathetic consideration of the Afghan request contained in the Economic Report. Despite concern over the adverse effect of the shift of nomads to sedentary agriculture, over transport difficulties in Pakistan, over the irregular trade with the Soviet Union, the staff saw promise in the reported favorable trade balance, averaging $7 million a year in the postwar period, and in the potential export values of the untapped mineral deposits. Moreover, financing of part of the plan was considered advantageous to the national interest of the United States.

The Board's negative decision, which was communicated to the Afghans on May 31, was based on the fear that a commitment to help the 5-year plan might lead into uncertain future obligations. The Afghan request smacked too much of a lump-sum loan, and the proposed terms providing for repayment over 18 years went beyond the normal practices of the bank. Moreover, bank officials expressed doubt regarding the availability, in time, of a labor force large enough to man all the projects.

It was recognized that some projects could not be omitted without impairing the effectiveness of others and that the country's ability to repay any loan was based on the concurrent completion of most of the projects. Yet the bank preferred (and considered it possible) to proceed gradually and let some projects await demonstration of the success of earlier ones. The bank would therefore consider another request differentiating between projects of first and second importance. Although the Afghans did not accept the reasoning, they agreed to reexamine their position.

Minister Madjid emphatically supported the adviser's finding of the projects' interdependence:

> What convinces me of the soundness of the proposed projects taken together is their economic interdependence. The textile-mill project is dependent upon (*a*) increased cotton cultivation and (*b*) expanded electric energy and fuel supply and (*c*) improved and expanded transportation services. A switch of arable land to cotton and sugar makes necessary increased production of grains, fruit, legumes in the Arghandab and Helmand Valleys. Cement and brick production are an economic asset to the irrigation and construction projects. Similarly new sources of electric energy and coal are essential to the new textile, cement, and brick plants. Finally, increased production of fruits, cotton and meat for domestic consumption as well as for export will intensify the ability of the Afghan economy to repay the hoped-for loan. Clearly the proposed projects are largely complementary to each other so that by withdrawing one, another must suffer. * * * [47]

On the matter of overall size the mission shared the bank's apprehension, though not to the same degree. So it was decided to eliminate some less essential projects; others were withdrawn in the hope that

[47] Memorandum to the bank from the Minister of National Economy, June 4, 1949.

funds could be obtained for them in Europe. Thus the small power stations, the ginning and cotton-seed-processing plants, the spinning machinery for the textile mill, the machine shop, and the new telecommunication facilities were eliminated from the list of projects proposed for American financing. Of the rest the Minister wrote:

> I am unable to make a similar suggestion in connection with any of the other projects. I am of the firm belief that they represent an irreducible minimum of investment which we should make promptly.[48]

All projects remaining on this list were declared equally important and the mission requested $42 million from the bank, instead $55 million.

Meanwhile M-K's 1949 expenditures were further limited and more non-Afghan employees released. The Moscow radio gleefully reported to the Afghan people that because of too slow progress the Afghan Government was canceling the 1946 M-K agreement and deferring further work.

The bank's proposals for priorities

The bank had criticized the inadequacies of the mission's eliminations and the lack of priorities. It had noted the effect of inadequate food supplies on Afghanistan's 1947 exchange position, when cotton-land diversion to wheat had reduced cotton exports and additional wheat still had to be imported. For that reason the bank recommended top priority to expanding food acreage, particularly in the Helmand and Arghandab Valleys, where a small contribution could be made to cotton as well.[49] Furthermore, these two agricultural projects would involve about as much risk as the bank was willing to assume.

The bank gave second rank to Kataghan cotton and sugar-beet acreage expansion although aware of the economic and political considerations, external and internal, which favored the relatively cheap irrigation program in the north. In a third category the bank set cement, brick, and tile plants, although admitting their savings of foreign exchange. Financial aid for the textile plants was discouraged because of the large proportion of foreign exchange required and the need for a stable supply of cotton first.[50]

The bank's staff expressed concern about the fact that the Helmand and Arghandab projects would not produce dollars directly and that the country's exportable minerals would require more investigating work before specific project proposals could be considered bankable.

M-K's president, recently returned from Afghanistan, supported the bank's position on priorities. Viewing the increased food supply as one of the major assets of M-K projects, he implied that the name of his firm, and indirectly American prestige, were tied up with continuing the Helmand Valley project. He hoped money would be available to finish the Boghra Canal and one of the dams. (But M-K assigned a higher priority to the Arghandab Dam than to the Kajakai Dam because of the former project's high fruit potential and exchange proceeds from exports.) He praised the Afghan farmer and his water husbandry, and assured the bank that reclaimed land would be used by the people as soon as water became available.

[48] Loc. cit.

[49] Cotton and beet-sugar production could be increased when an adequate food supply permitted permanent diversion of land to these crops. Only a stable cotton supply could provide the basis for a textile industry.

[50] The foreign exchange requested from the bank was only $7.9 million for certain machinery. The balance was to come from Europe.

M-K considered cement and electric powerplants near Kabul next in importance. It showed little interest in the Kataghan project, apparently unconcerned over the interdependence between the cotton and beet-sugar projects there and the irrigation projects in the southwest.

M-K warned about making the Afghans repay a loan in less than 40 years—the typical pay-out schedule for United States reclamation projects. It considered the Afghan amortization proposals reasonable since none of the agricultural projects could produce or save exchange for at least 6 years after their launching.

Meanwhile the Afghan Cabinet had split over Minister Madjid's industrial projects, which convinced the State Department that the Cabinet, unlike the Minister, might agree to a more limited selection of projects. Apparently the political foundation of the Minister's bargaining power with the bank was weak.

Late in June, at a final meeting with Minister Madjid, the bank's chairman informed him that under no circumstances would the bank make as large a commitment as $42 million. But the bank would consider an application for funds for 1 or 2 agricultural projects to get acquainted and start business with Afghanistan. For that purpose the Afghan Government should submit separate economic justification for each of M–K's agricultural projects—Helmand and Arghandab. The bank might also consider cement and brick projects which, if completed in time, might reduce the cost of irrigation construction.

In accepting defeat the Minister made clear that aid for a single project would not solve Afghanistan's exchange problem, since neither the Helmand or Arghandab would produce repayment in time to start amortizing the loan according to the bank's wishes.[51] For this reason the Government would have to secure other means for financing the supplementary projects.

Filing the final application

His bargaining power with the United States Government spent, Minister Madjid put further negotiations in the hands of his assistants. With the adviser they reevaluated 3 agricultural and 2 industrial projects, justifying each on its own economic merits, and treating the net foreign exchange required for each as a separate loan with separate amortization schedules. They were forced to agree with the bank that another drought might again upset the precarious balance between domestic food production, production for export, and domestic needs.

The decision as to how many irrigation projects could be given priority over industrial projects and how many should be postponed hinged on administrative and political matters. In particular, the number and character of Helmand River diversion structures in the delta area would depend on Iran's needs, yet there was no agreement with Iran on which to base a definitive investment program there. Hence the delta projects were deferred. The scope of the Kataghan

[51] In interpreting the bank's wishes the Minister and the adviser relied on the bank's General Policy Statement of September 11, 1945 which read in part: "* * * the bank makes only loans which offer reasonable assurance of repayment. The restriction of loan to specific purposes is an important means to this end, *as is also the spread of maturities over the productive life of a project in order to facilitate repayment.*" Item 7 (c), p. 7. [Italics not in original.] Subsequently the bank's policy had moved away from this criterion. See p. 58 below.

program was reduced so that its small exchange requirements could be met from reserves.

Although the bank did not encourage the mining projects, the mission argued that by the time the cement plant was producing, an increased coal supply would be necessary. Hence any consideration given the cement project had to include modern coal-mining and hauling equipment. As a result of these considerations, the total amount of foreign exchange needed was down to $38.9 million.

But the amount to be requested in the revised application depended on the state of the country's exchange reserves which would be considerably lower if they, instead of a large loan, were to finance some of the projects. Moreover, the karakul market had remained soft since January 1949.[52] Net liquid exchange reserves in the two banks were put at $7 million and the other foreign assets were long-term and fixed investments. The Government could commit only $4.7 million of its own funds, not the $23.3 million originally contemplated. Accordingly, the revised application requested $34.2 million allocated as follows:

	Million
Helmand Valley:	
Kajakai Dam	88. 8
Boghra Canal	9. 4
Arghandab Valley	8. 2
Subtotal	26. 4
Coal-mining equipment	4. 0
Cement plant	3. 8
Total	34. 2

The annual burden of amortization was to be lessened by spreading repayments on the cement project from the 5th year after construction through the 11th, on coal equipment from 5th to the 18th, on the Helmand and Arghandab projects from the 7th to the 18th. The maximum debt service in any year did not exceed $5 million, but because of the compression of large expenditures into a relatively short period, interest and amortization payments reached their peak in 1958, only 5 years after the end of the plan period. This could have been corrected by a staggered repayment schedule providing for equal or increasing annual charges. A decision on this depended on a further reexamination of the country's repayment capacity.

Reappraising Afghanistan's repayment capacity

This second application presented the country's exchange income over the development period as increasing more gradually and reduced anticipated Kataghan cotton exports by half and Helmand cotton exports by one-fourth. Conversely, with the textile project postponed, savings from reduced imports were cut to $0.5 million a year. Increased imports associated with the income effect of the investments were computed as they were in the Economic Report. The net improvement in the trade balance in the 12-year period starting in 1954 was expected to rise from $4.6 million in the first year to $14 million in 1960 and $20.8 million in 1966—the year of the last amortization and interest payment. The aggregate trade surplus over the 12 years was almost 4 times as much as was needed to service and repay the loan. No allowance was made for the cost of imported

[52] In mid-1949 the inventory value of the 1.3 million Afghan skins in New York warehouses averaged $7.10 each, compared with $9.50 the year before.

investment goods and services needed for the later development programs.

The adviser warned against filing such optimistic forecasts [53] but the mission had been instructed to use M-K's estimates of the export proceeds which primarily accounted for the projected upward trend in the trade balance. But the adviser succeeded in having the following reservation inserted in the loan application:

> [There are] two kinds of contingencies which confront [the Export-Import Bank] in connection with this application. In the first place, the calculations presented in this application are in part based on estimates and * * * may prove to be too favorable in the end. In the second place, in the nature of the proposed projects lies a certain risk associated with adverse weather conditions, danger of plant disease, and other natural obstacles to the achievement of the production and export goals.[54]

The application concluded that only by undertaking the 5 projects in the application concurrently with the cotton-expansion program in the north and the Sarobie power project near Kabul would it be possible to provide the Afghans with the benefits held out by the 5 projects.[55]

Reservations in the State Department and the bank

In the State Department doubts were expressed about the Afghan Government's ability to provide the continuous and coordinated technical and administrative direction called for by the Helmand Dam and Canal projects. The bank's response was that existing industrial plants had demonstrated the availability of some managerial talent and that M-K's president had assured them that, with prodding and perhaps a few supplemental M-K development contracts, the projects were not beyond Afghan administrative capacity. Furthermore, as the Afghans pointed out, their underdeveloped government could only develop when entrusted with sufficient tasks.[56]

The State Department also had some qualms about the trustworthiness of certain Afghan groups. It was feared that funds might be misused. The bank's examiner, in response, reported to the bank's board that it would seem that "our interests there * * * may be as well protected as in several other countries."

Furthermore, the bank would be protected by M-K vouchers, since all the borrowed funds were to be used by M-K.

Nevertheless, to satisfy these doubts and help the bank establish an overall loan limit, certain reassurances were requested by the State Department. Some Afghan answers were satisfactory. Foreign exchange resources had stopped falling since August; dollars held in the United States by Bank-e-Millie had increased by $1 million since the end of the last fiscal year. Karakul sales in New York had been brisk (albeit at the low average price of $7 per skin); liquid assets of the Afghan-American Trading Co. had improved and the inventory of

[53] Cutting the estimated trade surplus in half would have left a wide enough margin for unforseeable changes in export markets and import prices and still been more than adequate to satisfy the most conservative criteria of repayment capacity.

[54] "Application for Credit from the Export-Import Bank," August 15, 1949.

[55] Minister Madjid's negotiations with M-K over a $13.5 million contract for this power project broke down over the high stateside cost and the contractor's fee. But after the Export-Import Bank loan agreement was signed, a contract with a German firm was consummated.

[56] In the final instance it was Minister Madjid's record of achievements as an entrepreneur, his reputed talent for getting things done, and the bank's hope that he and his group remain in power which allayed the bank's fears about Afghan administrative incompetence.

1.3 million skins as of September 30, 1949, provided evidence of normal business volume.[57]

New trends in internal finance were less reassuring to the bank. While the increase in Da Afghanistan Bank loans to the Government had been partly offset by a reduction in loans to business, the Government's 1949–50 combined regular and development budget showed actual revenues lagging about 15 percent behind budgeted figures. But the overall deficit of 82 million afghanis ($4.7 million) was less than the development expenditures. The expected business increase in agriculture and foreign trade had failed to materialize, however.

The bank questioned the high proportion of dollar to total project expenditures (80 percent) even after 3 years of building up of equipment stock and permanent camp installations by M-K. It saw an opportunity for savings in personnel cost (by employing more Italian and Philippine staff instead of Americans) and in engineering (by close integration of equipment use on the two dams and perhaps by less mechanization). These questions were answered when M-K presented the mission and the bank with appreciably lower dollar requirements, after eliminating cost estimates for improvements to the irrigated land and reducing the contractor's fee from 10 percent to 7.5 percent—primarily on account of the expected increase in construction volume. Only 21 million in dollars was needed for the 3 agricultural projects instead of the $26.4 million included in the application.[58]

M-K's president tried to allay bank doubts about the Afghans' ability to carry through to the final stage the utilization of water and land; the Government had agreed with M-K that it would concentrate its limited managerial staff on the agricultural projects.[59] Furthermore—

> * * * the farmers * * * have * * * developed a technique for such services (land leveling, water control) * * * peculiarly adapted to their country and which is the method of irrigation * * * they understand and know * * *. The major officers in charge * * * have all been trained in operating large enterprises * * *. Provision will be made with the contractor for instructing and demonstrating the operation of all major installations * * *.[60]

The bank was not ready to accept this assurance without further staff exploration, particularly of the cost and time it would take to prepare plans for optimum use of water and land.

The bank also questioned some of the projects' engineering aspects, particularly the lack of data for a safe determination of the height of the dams and spillways and of agricultural reconnaissance surveys for planning the ultimate use of the irrigation water.[61]

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[57] In submitting the new data the mission assured the bank that lambskins would be a collateral against the hoped-for credit and also guarantee a normal supply of skins to New York furriers. (Letter to Export-Import Bank, October 21, 1949.)

[58] M-K letter to Abdul Rauf, September 21, 1949; letter of Rauf to bank, September 22, 1949. The revised timing of the construction of 2 dams generated alone a saving of $1.1 million. After a minor reduction in the coal-mine equipment-cost estimate, the loan request was down to $28.3 million before the bank made its decision.

[59] September 27, 1949, oral statement by H. Morrison to bank officials.

[60] M-K letter to Rauf, October 10, 1949, copy to bank.

[61] This reservation must not be confused with the bank's excellent impression of the results of M-K's experimental crop-growing. But bank officials considered these results as first steps to determining the long-run benefits from the projects. See F. O. Youngs, Report on 5 Years of Agricultural Work in Afghanistan, July 1951.

The bank's engineer concluded:

> No responsible engineer would risk his reputation on projects of the magnitude of the two dams if they were to be built in the United States on the basis of such meager data as are available in Afghanistan.[62]

Yet the bank was finally swayed by the contractor's placing of faith in empirical methods rather than on nonexisting or unreliable records. The calculated risk was taken—start developing a very underdeveloped area without spending several million dollars and another year or two in more surveying.[63]

The loan is granted

In November 1949 the board of directors accepted the staff's recommendation of a $21 million loan, equal to the gross dollar requirements of M-K's Arghandab, Kajakai Dam and Boghra Canal projects, including cost of fuel and lubricants, for which M-K expected to pay dollars in Pakistan, and a contractor's fee of about $2.3 million.[64] Although the board considered exaggerated the economic justification of the agricultural projects, in view of the small scale of the experiments by M-K's agronomist, it agreed that—

> * * * the potentialities of the [agricultural] projects appear so great that even if the claimed benefits are discounted substantially * * * the resulting benefits could still be of a magnitude which would justify the undertaking of these important projects.[65]

The board felt that about $7.5 million more would have to be spent by the Afghans for land preparation, local irrigation canals, drainage ditches, and access roads before the regularized water supply could be fully exploited.[66] Therefore it withheld approval of the Arghandab Dam until adequate data indicated what would actually be required to complete an integrated irrigation system there. As a further protection, the board decided that a proviso be inserted in the loan agreement pledging the Afghan Government to supply adequate dollar funds in excess of the credit to complete the projects (article II of loan agreement, January 17, 1950).

Considerations leading the board to override many of its staff's reservations reflected a convergence of national political and economic interests. In the first place, the loan was in line with United States financial policy—rendering aid to underdeveloped countries, not primarily to cover a balance of payments deficit, but to increase the total resources available for economic development and essential social services. Secondly, the bank had become aware that American prestige was closely linked with continuation of M-K's work and that political advantages could be obtained by allocating dollars to M-K's

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[62] The engineer was referring to 1949. In the early years of reclamation in the United States engineers did undertake this risk.

[63] Assured by M-K's president that the storage and diversion structures would regularize and increase the water supply for Iran as well as Afghanistan, the bank considered the credit before Afghanistan and Iran had reached any agreement—a move which antagonized the Iranians. In 1951 a neutral Helmand Commission made recommendations for a fair division of water. Meanwhile large Iranian landowners began building a large concrete diversion structure, without any arrangement with the Afghans. See Report of the Helmand River Delta Commission, February 1951. As of June 1953 still no formal agreement between the two countries had been reached.

[64] Mild pressure on the bank by M-K's president can be surmised. M-K felt morally obligated to do all it could to enable the Afghans to obtain the maximum benefit from the money already spent on M-K. As of September 1, 1949, the Afghans had paid M-K $11.1 million for purchases in United States and Pakistan and $8.9 million for services and purchases in Afghanistan (inclusive of a $1.3 million contractor's fee). About $4.6 million of this was the value of machinery, equipment, camps, and shops. M-K letter to Department of State, September 29, 1949; M-K admitted that "there should have been more * * * to show for this large expenditure."

[65] Memo of bank staff to bank board, November 3, 1949.

[66] The $3.5 million originally included in the Arghandab and Boghra cost estimates for such additional investments had been eliminated from the final estimate filed with the bank.

projects. In fact, the proposed loan contract with the Afghans included a clause stipulating that—

> Prior and as a condition to any advance under the credit Afghanistan shall have entered into a contract with * * * firms * * * acceptable to the bank and * * * that the contract * * * shall be satisfactory to the bank (art. V of loan agreement).

This standard stipulation reflected the bank's policy of permitting the borrower freely to select a United States construction firm. But having financed the contractor's dollar expenditures from their dwindling reserves, the Afghans were anxious to avoid further delay in obtaining access to the bank's funds. Working out a contract with a substitute for M-K would have entailed lengthy negotiations with a newcomer and examination of the proper qualifications by the bank. Under the circumstances, the expedient approach was to continue with M-K.

In determining the amount of the loan, the bank was guided by three major considerations: (*a*) The maximum amount of the debt-service burden the Afghan balance of payments could absorb over the average repayment period the bank had been granting for loans of this kind, (*b*) the amount of investment which could make the greatest contribution to close the intermittent food deficit in the Afghan economy, (*c*) the minimum amount necessary to enable the Afghans to give M-K an economical volume of business. The answer to the first question, depending on various assumptions about the export potential, ranged from $20 million to $25 million. The second criterion demanded the construction of the two dams and canal works which cost $21 million; the third criterion indicated a dollar business volume of not less than $7 million a year.

The inclusion of the cement and coal projects as complements to the irrigation-construction projects might not have been in conflict with the above considerations. But these two industrial projects involved extensive road-construction work and the erection of a powerplant, both shrouded in considerable engineering and economic uncertainties. By confining its loan to three irrigation projects the bank hoped to reduce the risk in the gamble it assumed.

Discussion of credit terms

The bank's January 17 draft agreement did not tie the amortization period and payments for each project to the economic returns on the investment in each project. It provided that all repayments should begin 6½ years after the agreement's date and run for not more than 9 years. Since the loan disbursements were determined by the contractor's progress (consuming at least the 3¼ years scheduled) only another 3¼ would remain in which returns from the projects could contribute to the first loan-repayment installment. To the mission this seemed too tight a squeeze. It argued that if the credit was designed to finance individual projects, repayment terms should reflect the different projects' payout schedules and be staggered. Furthermore, a fixed schedule did not take into account possible construction delays, and, consequently, delays in disbursement of the credit.

The bank rejected the Afghan proposal for staggered and stretched-out repayments on several grounds: (*a*) Too long a repayment schedule might encourage the Afghans to move slowly; (*b*) staggered repayments would be difficult to administer; (*c*) any amortization

schedule not starting on a fixed date would lead to an uncertain commitment of funds, with the result that the bank would never know how much money would be flowing back at what intervals—a serious obstacle in planning loans to other governments. True, the economic return of comparable domestic United States reclamation projects ordinarily served as the determining factor in the amortization of loans to settlers because the borrower could not rely on returns from other assets. But this rule did not apply here: the Afghan Government repayments could be tied to many other government assets, such as export and production taxes.

In commenting on the generous terms of the loans to Israel and Indonesia (noted by the Afghans), bank officials made clear that these loans were in a category by themselves. In each case, the United States Government, for overriding political considerations, felt it should help the establishment of a new state. And in each case, the bank, aware of the borrowing country's grave problems, had assured itself that previous investments from other sources, particularly in agriculture, had reduced imports and/or increased exports.

The mission had failed to recognize that the bank had actually become more flexible in determining the appropriate spread of loan maturities. Originally the bank restricted loans to specific purposes in order to assure repayments which were conceived as being determined by "the productive life of a project." [67] But since 1946 the bank had found this principle unduly restrictive, since it would exclude some reconstruction and development loans which would generate widespread economic benefits, even if the country could repay.[68]

It became clear to the mission that the varied conditions under which loan requests were made did not permit the bank to establish objective and uniformly applicable criteria—unlike certain commercial banks following precise risk criteria. So the credit agreement draft was accepted on March 1. But the Afghans had gained the impression that the terms could be renegotiated in the event of unforeseen developments.

New contract with M-K

Negotiations with M-K over the contract that had to be signed before bank funds were released became a series of snags. Three controversial issues were of concern to the bank. (1) In the proposed draft contract the Afghan Government was to be kept fully informed of the amount and type of procurement in the United States, but the responsibility for the amount and types of purchases was to be the contractor's. The Afghans proposed that M-K, in purchasing, act as Afghan Government agent, subjecting engineering plans and purchase orders to approval by the Afghan Government and permitting it to determine wages, construction methods, and subcontracting. M-K demanded full confidence in its ability to handle both functions, engineering and construction, and after threatening to transfer to the Government all responsibility (which the Government neither wanted nor could handle) M-K won its point. At the bank's suggestion, however, the final contract text (April 20, 1950)

[67] Export-Import Bank, General Policy Statement, September 1945, item 7 (c), p. 7.

[68] This shift in gaging the legal requirement of reasonable assurance of repayment was reflected in an amendment to the bank's General Policy Statement which read, "The bank endeavors to select those (loans) most likely to improve the economics and international financial position of the borrowing countries." (General Policy Statement, August 1, 1947, item 7 (c), p. 5.)

provided that consultants selected by M-K and approved by the bank, the Afghan Government, and the American Society of Civil Engineers were to certify twice a year to the contractor's compliance or noncompliance with standard American engineering practices and the presence or absence of negligence, misconduct, bad faith, and carelessness. The consultants' findings were to be final.[69]

(2) The "percentage fee plus adjustable target estimate" was the second issue between the Afghans and M-K which concerned the bank. The contractor preferred a fixed fee based on a relatively high percentage of a relatively high estimate of total cost. A compromise was worked out; the fixed fee was subject to adjustment only if quantities or prices of materials and equipment or Afghan wage rates changed. Ten percent of the difference between actual and adjusted estimated cost was to be paid to the contractor in case of savings, to the Afghan Government in case of excess. Even this compromise was stalled for 9 weeks of dickering over the basic percentage underlying the fixed fee. Agreement was reached on 6 percent, on M-K's condition that the Arghandab Dam (bank approval of which was still in abeyance) was included in the bank loan.

(3) Land-development work, particularly in the Arghandab Valley, was the third issue. Doubtful about the profitable use of storage water without substantial further investments, the bank had M-K send out a survey party to estimate the types of expense necessary. Meanwhile the Afghan Government accepted responsibility for land-development work with or without the contractor's help. By March, M-K reconnaissance in the Arghandab Valley revealed that roads needed about $269,000 worth of attention. On April 10 the Afghan Ambassador requested that the Arghandab Dam be approved for bank financing since the additional investments seemed small: In its M-K contract the Afghan Government included a clause permitting the Government to ask M-K to carry on land-development work on any of the three bank projects, even though bank financing was uncertain. Thus the Government obtained bank approval for the Arghandab Dam and the loan agreement was signed on April 21, 1950, with a clause proposed by the Afghans whereby any funds left over could be used for additional irrigation projects approved by the bank.

VI. Aftermath of the Loan Agreement

When the loan agreement was signed, Afghanistan's Council of Ministers had still not passed on the revised 5-year plan. Opinion became more sharply divided, with alarm expressed over the depletion in dollar reserves, the high cost of M-K projects, the rising cost of living, and the high cost of cotton textiles. Some Afghans distrusted Minister Madjid's shrewd business methods; others resented the lethargy of the royal family (which included the Prime Minister) toward economic development. In June Parliament demanded explanations from Minister Madjid, which he apparently failed to provide. The loan agreement and the new M-K contract were tabled. In the course of a dispute with the Prime Minister over exchange allocations the Minister resigned (June 1950).[70] Over the

[69] Among these consultants was John L. Savage, internationally famous Bureau of Reclamation water engineer. All consultants expressed satisfaction with M-K's work (up to December 1952).

[70] The adviser's contract was terminated at about the same time. His subsequent contacts with American and Afghan officials were informal and personal.

summer uncertainty reigned. Many officials feared to lose their jobs in the continuing squabbles over economic policies between the business group and the Prime Minister upon whose political power Minister Madjid's development program had encroached. M-K prepared for a drastic "surplusing" of men and equipment.[71]

In September the Cabinet finally approved $4 million for M-K (roughly following the previous year's expenditure rate) and on October 12 the loan agreement was ratified by the Lower House of Parliament.[72]

On January 1, 1951, the Ministry of Justice issued a legal finding that under Afghanistan's fundamental laws the international credit agreement legally bound both parties. In March New York's Chase National Bank was officially advised that letters of credit issued in favor of the Afghan Government and complying with the loan agreement would be honored by the bank. Within the month, the Afghan Government had borrowed $4.8 million. Its first interest payment of $28,376 was made on the agreement's first anniversary, April 21, 1951.

Construction projects on schedule

Besides receiving quarterly progress reports from the Afghan Government the bank sent an engineer in March 1951 and its secretary, an engineer, and an economist in April and May 1952 to inspect project sites. The second survey group found the Arghandab Dam proceeding according to schedule.[73] Unexpected ease in building tunnels and embankment protection and the unexpected proficiency of Afghan workmen had saved $2.5 million. The bank's 1952 team also learned that the original acreage estimates were too low; 156,000 acres could be irrigated, adding 56,000 acres (not 20,000) to fully irrigated farmland.

On December 27, 1952, the dam was formally dedicated.

On the Boghra Canal project M-K had maintained the predetermined time schedule and saved some $600,000 in direct cost.[74] But the timing was not coordinated with other activities. Planning and designing had fallen behind:

> The construction schedules to maintain uninterrupted operations for the contractor are pushing the engineering planning, and the engineering planning is depending on the agricultural planning, so the latter becomes the control for all operations.[75]

In contrast, at the Kajakai Dam rock- and earth-fill operations had become unbalanced because of equipment breakdown and other inefficiencies. Unexpected seams in the foundations and abutments developed. Delivery was delayed on badly needed drills, compressors, and valves. While completion was expected in time for the 1953 spring flood, a small overrun in direct cost was anticipated.

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[71] When in June M-K announced that work would have to be halted, an interim allocation of $1 million was made by the Afghans with M-K committing $200,000 of its own. The delay's cost was estimated at $1 million and idleness in Afghan workshops added to cost but not to progress.

[72] A rapprochement between the Government and the business group revealed the Government's dependence on the latter for implementing the private investment program to which Da Afghanistan Bank and many a royal family member were tied by shareholdings.

[73] Embankment work was completed 2 months early. Tunnel and spillway work was postponed until August. The diversion tunnel was closed in time for storing the 1952 spring flood. During June the maximum water level was reached (storage capacity amounting to 385,000 acre-feet) and release of water started. Equipment was ready for transfer to Kajakai according to plan.

[74] Boghra concrete works and canal protection against surface runoff were completed to kilometer 51, with water available during the winter of 1952 for 60,000 acres. Shamalan branch excavation work was 80-percent complete. Work here was complicated by the canal's use as normal water supply source for about 46,000 cultivated acres along its 66-kilometer course.

[75] Export-Import Bank Mission to Afghanistan, Engineer's Report, June 23, 1952. Also bank letter to Prime Minister, May 19, 1952, and M-K, quarterly progress report, April 1 to June 30, 1952.

Total net savings on all three projects were expected to be $2.3 million ($1.7 million in dollar exchange).

Development delays along the Boghra Canal

Serious delays developed in preparing Boghra land and selecting settlers. Inadequate thought had been given to such problems as optimum size of land units, settler priorities, village location, community organization, and reimbursement to the government for land, water, and services. There were not enough trained Afghans in the government to handle all the administrative machinery, some of the few available having left the government along with the Minister of National Economy. Consideration was given to hiring foreign advisers for the purpose, but there still had to be an internal mechanism for the advisers to fit into.

In early 1951 the Afghan Government gave M-K the task of reclaiming, preparing, and helping to settle 16,000 acres along the Boghra. The settler, taking over after M-K had delivered water to the highest point on the farm plots, was to receive government help in building his house, seeding, cultivating, and controlling his water supply. Reluctantly assuming this responsibility, M–K insisted on close cooperation with the bank, since the lender's pressure might be needed for the Afghans to implement their assurance that settlers would be put on the land in time to use the ample spring waterflow. The bank in turn encouraged M-K to take a position of "firm and friendly leadership and guidance." [76]

The bank's first inspection in March 1951 revealed the lack of administrative machinery to get settlers settled in the Helmand Valley as construction progressed. Inexperienced, overly centralized government departments issued conflicting instructions, functions were unduly divided between the capital and field headquarters, and progress in training Afghans for development operations was slow. Only 3,570 acres were under irrigation, on 1,570 of which M-K grew wheat and hay for its own use. An additional 1,800 acres awaited settlement. Authorized settlers numbered only 150, with 375 more awaiting "processing" in Kabul. Nomads had started squatting, preparing to take water without waiting for allocation of plots.

Drainage was surprisingly poor. Without an underground-water survey little could be predicted about seepage losses. But it could be noted that the water tables in M-K farm wells had risen to within 2 feet of the surface, bringing plant-killing salts to the upper land layers and waterlogging the richer bottom lands along the main riverbed. The bank recommended the installing of drainage canals and pumping water to higher lands for irrigation there. More crucial was the need for better training in economical water use and prompt repair of leaks.[77]

Although the Economic Report of 1949 could have left no doubt, the bank's engineer was taken aback by the mere 3 inches of sandy loam covering clay loam and gravel on most of the Boghra lands. The poorer soils produced only 15 to 20 bushels an acre and the better, 25 to 30, half the American yields on reclaimed land. The marginal land produced only 200 pounds of cotton per acre, but the loam pro-

[76] M-K letter to M. Chouaib, January 28, 1951. (Chouaib represented the Afghans in the United States in M-K matters.)

[77] Unpredictably, gypsum (guch) formations in and under canal banks had caused excessive seepages and the collapse of affected portions of the banks because of gypsum's water solubility.

duced 1,300.[78] Alfalfa, demanding a less deep topsoil, was doing better on both kinds of land.

In May 1952 the engineer reached 3 conclusions: (1) The arbitrarily set size of the settler's standard plot (10 to 12.5 acres) was indefensible as an economic unit for a family of 5. He recommended a United Nations technical assistance sample survey to determine appropriate sizes under varying soil and crop conditions. (2) The location of village centers at 4 kilometer intervals (each accommodating 480 families) would have to be changed to save good soil and topography. (3) The most economical crop assortment would be irrigated pasture, wheat, and vegetables. Wheat, the standard crop of Helmand farmers, should take no more than a fourth of the acreage.[79]

This was a revolutionary finding which most settlers did not heed; they planted 90 percent of their new land in wheat. But the size of the standard plot was increased to 15 acres.

Poor production inevitably affected settler income. In 1951–52 125 units grossed only $29 per acre on farmsteads averaging 15 acres. Their income might have been doubled if they had diversified crops and produced standard yields instead of concentrating on wheat and producing half the standard yield. As it was, even on a 25-acre farm (the size M-K recommended as an economical average) the gross income for that crop year was barely half the minimum living expense for a family of five with no allowance for taxes, operating expenses, and fixed charges on house and tools. How under such circumstances the Government could expect reimbursement for land and buildings and thus be assisted in repaying the American loan was difficult to see.[80] Yet settlement made some progress: by the middle of the 1951–52 crop year 4,000 acres were under cultivation by Afghans, exclusive of 2,000 acres turned over to a Government experiment station.

Concerned over settler income lower than anticipated and development costs higher (especially because of the need for drainage works and extension services) the bank and the Afghan Exploitation Commission agreed not to build one Boghra branch (23 kilometers, at $844,000, leading to second-class land), hoping the proportion of good to poor land in the remaining project area would be increased.[81] In this case the lack of adequate advance surveys was remedied by recognition of erroneous construction estimates.

New difficulties emerged late in 1952. Although by then 10,500 of the 16,000 acres prepared by M-K were cropped, only 1,500 were worked by settlers; 6,000 were farmed by or for large landowners. Meanwhile more nomads had settled on nonirrigable land, and about 15,000 settler applications awaited processing. To settle a larger number the Exploitation Commission had reduced the farm unit to 7.5 acres, yet the settlement cost per farm unit had become 20 per-

[78] All yield data are based on experiments with untreated soil.

[79] This recommendation caused consternation among Afghans, since permanent pasture required a radical change in approach and an expanded extension service. In 1952 the examination of comparative yields and income from wheat and pasture farms showed that "keeping three-quarters of the land in grasses does not mean a decrease in income, in fact (yields) income far greater than would be obtained by growing wheat on all the land each year after people learn its value for livestock." C. L. Fly, Recommendations for Land Use and Land Settlement in the * * * Nad-i-Ali Tract, November 1, 1952.

[80] The Government's newly established Helmand Valley Exploitation Commission had been authorized to borrow 18 million afghanis from the state bank for aiding settlers. It counted on reinvesting all net income on land improvements.

[81] The bank also agreed to M-K's recommendation of a cheaper and better location for the Shamalan branch, cutting construction costs by another $500,000. Additional savings due to unpredictable rock and foundation structures near the dam sites further reduced cost estimates by $1.5 million.

cent greater than, originally, the cost for 12.5 acre units. At the existing rate, bank observers did not expect more than 2,000 additional home units by the end of 1952, just enough for the acreage being prepared by M-K under its first land-development contract. (But by the end of 1952 some 60,000 more acres could have been ready for settlement under a new supplemental contract being discussed with M-K since June.)

The bank's engineer informed the Government that the development of the valley's resources would require a further outlay of $46 million, including the cost of settlement and the training of technicians. He recommended an autonomous valley authority to coordinate ministerial activities, provide extension services, and manage the water supply.

The bank's subsequent pressure, which some afghan groups had been hoping for, did result in the establishment in July 1952 of an autonomous Helmand Valley Authority directed by the Governor of Herat Province, a capable administrator and politician. The Government, supported by American and United Nations technical assistance officials, gave supreme powers to the authority—a fact which led the bank's engineer to warn:

> There is a strong possibility that ministerial and political problems might develop. The Helmand Valley is a large segment of the country * * * The already weak (regular) Government agencies will be drawn on for staff for the new commission and will be further weakened * * *. The Export-Import Bank cannot tell the Afghan Government how to run their business, but it certainly should use all influence possible to help them set up a sound working organization. The bank should certainly obtain a full understanding of the final plan.[82]

The bank considered the most serious issues to be the lack of advance timing of the various development phases, permitting surveying, reconnaissance, and land classification to stay sufficiently ahead of land preparation, and the plotting of irrigation ditches and farm units. It became clear to the bank that problems of organization, planning, financing, and operation were too large to be handled by the limited number of qualified Afghan personnel available to the Government under existing political conditions. It expressed the hope that United Nations and United States technical assistance missions and M-K cooperate with the Afghans to secure the benefits of the bank's investments. But such was not forthcoming for some time.

International complications over Helmand water use

Ever since its engineer had returned from his 1951 inspection trip the bank was concerned over the lack of an understanding with Iran concerning the division of water in the Helmand delta. In early 1950, under United States pressure, Afghanistan and Iran had agreed on a neutral technical commission—

> * * * to recommend to the Governments an engineering basis for a mutual accord regarding the apportionment of the Helmand River Water; to recommend technical methods by which the shares of water may be allocated (after agreement thereon).[83]

An interpretive note of the State Department said that the commission was expected—

> * * * to determine what quantities of water have in the past and do at present reach the delta area and shall study the effect * * * of works now existing, in construction or in present contemplation.

[82] Export-Import Bank Mission to Afghanistan, Engineer's Report, June 23, 1952.
[83] Report of the Helmand River Delta Commission, Washington, February 1951, p. 4.

The findings, factual and advisory, had a bearing on the merits of the bank's loan to Afghanistan.

In its report, which was not released until the summer of 1951, the commission referred to two British arbitration awards (1872 and 1905) providing that no irrigation works were to be carried out on either side of the Helmand interfering with the requisite supply of irrigation on both banks of the river in the delta. Subsequently the initiation of upstream irrigation structures by the Afghan Government had revived the Iranian's dissatisfaction with the earlier awards and the 1947 drought had heightened their apprehension.

The commission's findings about current and potential cultivated acreage were less optimistic for the Afghan side than were those of M-K: only 36,000 acres were actually irrigated in the Afghan delta with twice that much irrigable, whereas M-K had set the potential at 200,000 acres. In contrast, on the Iranian side there were 150,000 acres under irrigation (not 50,000) with twice that much irrigable. So regulation at Kajakai would benefit the Iranians three times as much as it would the Afghans, as far as the delta was concerned. To the commission Minister Madjid had pointed out that before 1939 the deeper river bed of the Afghan arm of the Helmand had provided Afghan farms (in the Chakhansur area) with summer and winter water, permitting two crops each year. During the 1939 flood the level of the beds had shifted to favor Iran, forcing several thousands of Afghan families to move away. Moreover, apparently accepting the deepening of the bed of their arm of the river as permanent, the Iranians had completed the first of two reinforced concrete diversion dams spanning the full width of their arm of the river without giving assurance that the water level would be kept high enough to permit adequate flow into the Afghan arm.[84] Cooperation on the customary annual rebuilding of earth-fill diversion structures at the bifurcation had been abandoned. An Iranian claim to a share larger than the traditional one-third of the water could be expected. While these moves could be interpreted as responses to the unilateral initiation of the Afghan Helmand projects upstream, Minister Madjid threatened to use "economic persuasion" since Afghanistan controlled the entire upstream river flow.

As the commission remarked, despite kinship in language and culture and a common destiny (with respect to water), the people in the delta had allowed the political boundary, coinciding with the middle arm of the river, "to become a barrier to the simple operation of the joint irrigation of the delta." Without specific reference to the bank's part in the Afghan projects, it eloquently warned both Governments against competitive construction programs:

> The present plans * * * in the delta include expansion far in excess of the capacity of the water supply. Past history, as indicated by the ruins of irrigation works of long since departed civilizations, is replete with the evidence of struggles to make such (expansion) dreams come true. The remnants * * * speak for themselves of the limiting factors * * *.
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> The difficulties of making diversions will not be over until some control works are placed in operation through cooperation.[85]

[84] Statement of Abdul Madjid Khan, November 1950, reproduced in Helmand River Delta Commission report, p. 149. Details on the dams are from Prof. Richard N. Frye's unpublished description of his visit to the dam sites in January 1952.

[85] Op. cit., p. 105.

With particular regard to the Kajakai Dam and the Boghra diversion and canal works, the commission recommended that the rate of storage in the reservoir should be so limited that the required normal flow to maintain the existing uses in the delta would not be depleted. Since it was evident that, without the benefits of storage, Boghra farmers' withdrawal of water in the low-water months would reduce the normal flow in the delta the commission advised against any faster development of the Boghra lands than then contemplated (60,000 acres by the end of 1953) and added that "harmony may be reached on this point if water is diverted * * * only when sufficient flow is available in the river for both (i. e., delta and upstream) uses." [86] Rivalry over the delta water supply was in danger of being heightened by the Afghan Government's natural desire—shared by the bank and M-K—to establish the Boghra's repayment capacity as quickly as possible. But the delays in Boghra land development temporarily postponed a serious clash over water claims. Bank and Afghan Government officials hoped that the completion of Kajakai in 1953 would promote the chances of an agreement between the two Governments. At the time of writing, the Afghans had accepted the factual findings of the commission as a basis therefor.

Second loan application

Increasingly concerned over the approaching exhaustion of the loan funds and the threat of work interruption and aware of the continued interest of the bank and the contractor in the completion of the land-development program for areas supplied with water from the new reservoirs, the Government in September 1952 accepted most of M-K's earlier proposals for additional construction. It authorized its Ambassador in Washington to proceed with a new credit. The January 13, 1953, application for a $20 million second loan encompassed not only the opening up of new land under the Arghandab Dam (29,000 acres) and under the Boghra Canal (78,000 acres), but also the improvement—through better drainage and water control facilities—of the existing irrigated acreage in both areas (127,000 acres altogether). The dollar cost of the proposed projects was put at $6,200,000. To boost acre yields in the Boghra area the Government declared itself willing to try out larger individual farm plots (25 acres) combined with a community pasture system under which each settler would have grazing rights on additional 23 acres of community property.

A second category of projects included the Arghandab power plant ($2,100,000), a chrome mining program ($400,000) and a comprehensive soil survey of the Helmand Valley ($1 million). Obviously influenced by social and political considerations, the Government also requested $4 million for improving and paving 119 miles of country roads in the Eastern Province, mostly radiating from Kabul, and of 19 miles in Kabul proper and its suburbs. $900,000 was needed for putting a black top on the Spin-Baldak road. To support the new and older road projects and to launch an adequate road maintenance program, the application also requested $1,300,000 for maintenance

[86] Op. cit., p. 125. The flow needed for the Iranian delta was estimated at 530,000 acre-feet a year, roughly one-fourth of the Kajakai storage capacity. The area potentially irrigable from the Helmand was given as 370,000 acres. Either proportion might have served to persuade Iran to assume a substantial portion of the Kajakai Dam cost. This idea, advanced by M-K early in the loan discussions, was dropped by Minister Madjid as being outside his competence.

and shop equipment. In late recognition of a pervasive handicap in economic development, the Ambassador wrote the bank:

> Under present road conditions the deterioration of vehicles is rapid, and the cost of repairs, parts, and tires is in dollars * * *. There is a constant increase in traffic, resulting each year in the increase of the discrepancy between the excessive operating cost and the cost of road improvements which would be sufficient to eliminate the excessive portion of the operating cost. Any reduction in excessive wear [of vehicles] will reduce the requirements of dollar exchange.[87]

The estimated dollar cost of the eight projects was less than the amount of the desired new loan, it being anticipated that from among the many remaining development opportunities the most vital ones could be determined only as work went under way. Here then was a request for earmarking approximately $4 million for projects not yet determined.

The economic justification backing the individual projects reflected, on the whole, a more conservative outlook on crop yields * and, repayment capacity (40 years for the agricultural projects, 30 years for the power project). But the improvement in the overall exchange earning capacity of the country was uniquely linked to a hoped-for increase in agricultural exports to India by approximately $5 million a year some time in the future. Competition with Pakistan and other suppliers of India was ignored as were the increased import requirements of Afghanistan itself. A narrow regional approach to the exchange shortage was evident in the failure to take account of the impact of the progress made in the textile industry in the north and of the Sarobi power project near Kabul.

As of June 1953, the bank had not acted upon the request, waiting for a new economic appraisal of the entire program by its own staff. Meanwhile M-K looked forward to a rapid demobilization, beginning with the third quarter 1953.

VII. Appraisal of the Loan

By April 1953 only $1.7 million of the $21 million loan remained, most of it to be spent on Kajakai Dam water-control installations. The dam began backing up water in April, 1 year after the Arghanadab Dam started to do so. Water was available along the Boghra-Shamalan canal system, except for 15 kilometers at its end. Concern remained over inadequate drainage facilities, the lack of protective dikes against intermittent washes, and leakages and breaks through the weak gypsum layers along the embankment.[88] But by fall 1953 crops along the Helmand would be able to benefit from summer watering for the first time since the time of Alexander the Great. Unfortunately, however, the Afghan Government had not kept pace with construction progress. By April 1953, it had not added more than 1,800 acres to M-K's land-development contract work on 16,000 acres for settlement, nor had it set up an adequate development staff to assist thousands to settle. Technical assistance under point 4 was being supplied slowly to fill this gap.

By July 1953, after a third inspection trip by the bank's staff, it was possible to reach certain conclusions which may bear on the bank's approach to an anticipated Afghan request for additional

[87] Letter to Export-Import Bank, January 13, 1953.

* The goal for crop values in the Arghandab area was only $73 per acre, $65 in the Boghra area.

[88] The Afghan Helmand Valley Authority authorized M-K to spend $1 million leftover (loan funds) to build 2 such dikes, an additional waterway, and a service road along the Shamalan.

funds to finance more diversion and protective irrigation structures, drainage works, and accelerated settlement.

Inadequate preparatory surveys

The inadequacy of advance surveying was underlined by the bank's November 1949 recommendation that the need for canal work and land development be surveyed before loan money was spent on the Arghandab dam. The bank deplored the lack of basic data, such as river-flow records to calculate the dam's ideal height or the best water supply and land use.

The lack of information about the Helmand's lower reaches and the effect on users of an improved and enlarged water supply became evident when M-K in February 1, 1952, urgently requested the Government to authorize expenditures for—

* * * acquiring data as to areas and locations of existing irrigated areas so that computations can be made as to what amounts of water are required and where.[89]

On this information depended the proper use of water behind the Kajakai Dam (then halfway completed) as well as the rate and sequence of land development. M-K had justified proposing a construction contract before these surveys, because it had faith in its empirical method and visual reconnaissance backed by its experience in the northwestern reclamation areas of the United States. This approach had found a sympathetic response among most Afghan officials, who disliked spending time and money on surveys.

Cost estimates for the Arghandab works had to be drastically changed because of uncertainties about the extent of the cultivable area, the water requirements of individual crops, the status of diversion weirs and canals, and their capacity to handle more water. Not until after the dam was finished were enough statistics on hand to appraise the project's burden and benefits. Then surveyors discovered that 156,000 (not 120,000) acres could benefit from the new or improved water supply. Surveys of soils and the water-table level even for the 120,000 acres proved inadequate to determine precisely the amount of land that could take additional water. The revised findings led in 1952 to a new proposal for developing 70,000 acres for river-water irrigation at a dollar cost of $6.5 million—a necessary and logical utilization of the Arghandab Dam. More startling was the miscalculation of the improved yields. In 1952 reclaimed land along the Boghra Canal grossed an average of $29 per acre for 125 settler families, equivalent to one-fourth of operating and living expense for a family of 5 cultivating 15 acres. In the Arghandab Valley in the same year crop values averaged $47 per acre.[90] These yields were a far cry indeed from the hoped-for $95 and $148 per acre, respectively, in the two areas, under good rotation with excess salts and water removed.

The disappointing results foreshadowed the urgent need for more effective guidance of settlers and administrators alike, better organization of water control, and perhaps a reappraisal of the soil's productive capacity. Moreover, they enhanced the value of the intensive aerial and topographical survey of the lower reaches of the valley, the results of which were to become known in late 1953.

[89] M-K attributed the lack of recognition (in early reports) of serious drainage problems to the lack of Government authorization for drainage analysis.

[90] Compared with $89 per acre estimated in 1948 for then cultivated Arghandab land. Prices of produce had increased since then.

But insistence on these ultimately indispensable surveys as a prerequisite for the loan might have created serious dissension within Afghanistan and serious doubts throughout central Asia about the United States Government's willingness to help a fledgling economy and the ability of American engineers to build successfully within the framework of the Afghan made 5-year plan. In advising the Afghans and the bank to go through with the construction projects, the contractor and the adviser took a chance on experimental construction so that some show of progress could be presented to the Afghans. The bank, in turn pressed by the Department of State's political concern over containment, took a chance on the contractor. The fact that subsequent international developments did not appear to justify this concern does not invalidate the basis for the decision not to await more surveys. For no one can say what would have happened in Afghan-Soviet relations had the bank not supported the work of M-K men who were viewed by Afghans as representatives of the United States. Only in one respect could the Afghan Government have avoided the uncertainty of insufficient surveying. Instead of dispersing development efforts over 20 or more possible projects prior to 1949, it could have confined the work to the original contract projects and related extensions—above all the surveying of Helmand land and water use below the Boghra Canal.

Afghan planning and personnel

Up to December 1952, Afghan Government planning consisted of putting projects recommended by foreign engineers into a big reservoir for future selection as resources permitted. In the absence of a periodic reappraisal of the country's resources and objective criteria for priorities, decisions on new investments were bound to remain haphazard. During the loan negotiations it became clear that reduced resources were not being shifted according to centrally determined priorities subject to professionally substantiated analysis only. Instead, political rivalry was permitted to extend to competition between Helmand projects and private industrial projects for men and foreign exchange. Or long-term factors were simply not taken into account.

Minister Madjid might have installed a planning unit, as he was advised, to carry the program forward without concessions to partisan interests. Perhaps such a unit was not created because it was feared certain prerogatives would be transferred from the Ministry to the new body. But there was an intellectual block as well. The Minister failed to grasp the concept of a planning organization as a policy-coordinating unit, allocating resources—in this way eliminating competitive bidding for limited goods, services, and foreign exchange.

The bank might have made the establishment of a planning and development authority a condition of its loan. Substantial groups within and outside the government would have supported the purpose of an effective planning authority. The bank's action in Haiti provided a useful parallel.[91] If the bank had worked out in time a method of cooperation with the United States and United Nations technical assistance missions in Afghanistan, its loan might have been the catalyst needed to start an Afghan planning unit.

[91] A loan was extended for a comprehensive valley development scheme—after the Haitian Government had promised to arrange for qualified supervision of the agricultural development program in the valley. The bank's position was strengthened by the presence for many years of Institute of Inter-American Affairs technicians who were expected to help supervise the development program. See 12th Semiannual Report to Congress, January to June 1951, p. 13.

This might have required a drastic revision of the bank's approach to financing development in backward areas. With its successful experience built up by loans to foreign agencies supplied with managerial and technical skills and itself confined by legislation to "portfolio" loans, it could not easily switch to the approach of a "direct" investor who helps supply the skills and, as part owner, supervises the project. But the Afghan case appears to demand a reconsideration of this policy of the bank when applied to virtually empty areas.

Yet, had the bank used a more forceful approach in 1949, suggesting specific measures of organization of, and sources of supply for, the needed skills, it might have exposed itself to criticism of interventionism and might have hurt the sensitive pride of some Afghan leaders. From mid-1953 on—after a sobering experience—the bank would be on firmer ground if it took on responsibilities beyond those of a mere moneylender.

One of the greatest handicaps in the program was the lack of adequately trained Government personnel to coordinate governmental and private services and properly time the development program. Apparently the Minister hoped he could himself correct planning defects as work went forward. He was unaware of the fact that the need for continuous review of the program's feasibility and its adjustment to changing economic conditions required services beyond the technical competence of his Government.

Toward the end of 1952 a substantial number of American Government officials had convinced themselves that the Helmand project was headed for the worst if left alone, i. e., if deprived of the kind of assistance which could help the Afghans deal with political factionalism, personal favoritism, shortsightedness, and inefficiency. Since the Afghans had stamped the Helmand project as an American venture, there should have been no hesitation about importing qualified administrators into the Helmand as part of the loan even though this step might depart from routine moneylending.

The role of the adviser himself provides a footnote to the problems of Afghan planning. His contractual obligation with the Minister made him available for continuous and intensive association, in the course of which he might have influenced the mission's economic thinking. But he was not invited to analyze the pressing collateral social and international problems as he saw them arise in all their ramifications. Instead he was asked to produce specific solutions for correcting defects in planning and economic reasoning as the work went forward. Under the circumstances he could hardly transfer the techniques for producing such solutions. He had little impact outside the joint preparation of the Economic Report and the final credit application. To trace this wasteful use of a foreign adviser to slowly changing attitudes toward foreigners and their historical roots would take too much space. The fact that many experts within Afghanistan served to little better purpose was observed by one United Nations economist who wrote in September 1950:

> Experts have frequently been played off against one another as gladiators of techniques, with the Ministers and other political figures taking sides * * *. These contacts have obstructed action on the part of the Government * * *. All (foreign experts) are bitterly dissatisfied with * * * the failure to utilize their services.

But there was more than rivalry of bureaucrats: technological problems posed by Afghanistan's topography, resources, and limited funds gave rise to serious differences of approach among western technicians and experts.

The lost opportunity: Industrial progress

The initial decision to support exclusively agricultural projects reflected the bank's concern over Afghanistan's pressing food problem. Was that decision justified at the time and vindicated subsequently?

Once the bank had limited itself to agriculture, Minister Madjid pushed ahead independently on the industrial front. In 1950 a German firm started the Sarobie power project; near Kabul 15,000 additional spindles were ordered from Europe for the old textile plant, and contracts were signed for a new textile plant with a spinning capacity four times as large. Thanks to high world prices, northern cotton production reached 12,000 tons in 1951 and 7,000 tons were exported. Coal and cloth production also increased.

The bank's economist in 1952 predicted larger and quicker foreign exchange returns (starting in 1957) on the new industrial projects than on all the irrigation projects. Viewing a limited amount of industrialization and roadbuilding as essential to balanced development the economist concluded:

> The projects themselves have been sensibly chosen and are precisely those which seem called for at this stage of Afghan economic development. * * * The overall plan is unusual in that there are few if any prestige items or grandiose schemes befitting a much later stage of economic development.[92]

If the maximum outlay of foreign exchange occurred before repayments began, the bank's economist considered a simultaneous advance on the industrial and agricultural fronts justified, since the industrial program in the north assured quicker profits and therefore more money for investments elsewhere. At the same time it seemed to the bank that expensive agricultural investment in the southwest had been a political necessity, internally and externally. As a test of successful cooperation between the West and Afghanistan, the completion of the work started by the American contractor under unhappy circumstances called for support. Moreover, the gamble on the uncharted agricultural resources of the southwest seemed justified, in retrospect, if it could open the way (1) to a permanent increase in the country's food supply, (2) to the settlement of a portion of the wandering nomads looking for a more stable livelihood, and (3) to the exploitation of the easily accessible export markets in nearby Pakistan.

Perhaps the bank should have financed small industries supplementing the Helmand-Arghandab agricultural program; for instance, hand looms for cottage industry and mechanical spindles for the Textile Co., cutting down the need for imported textiles. Inexpensive short-term projects like these, along with the longer-term reclamation investments might have added up to more money than the bank considered it wise to lend. But the larger sum might have

[92] Export-Import Bank Mission to Afghanistan, Economist's Report, June 26, 1952. No invidious comparison with the bank's early examination of the overall plan is intended here. The first examiner did not have the advantage of personal observation. The economist quoted above was not with the bank when the loan decisions were made. It should be noted that in September 1950 the United Nation's first economic adviser in Afghanistan had warned that the plan would be unbalanced and exposed to the risk of failure if all the foreign loan went into irrigation and nothing into mining, manufacturing, and service industries. See Annex VII. a. of U. N. Technical Assistance Mission Report, October 1950.

carried a lower risk factor for every dollar committed than did the smaller sum. In July 1953 it looked as if the bank would have to add to the original loan for precisely that reason.

It must be recognized that the bank's financing of agricultural programs had a substitution effect. Da Afghanistan Bank, relieved of exchange expenditures for the agricultural programs, could sell $11.5 million in foreign currencies for industrial projects during 1950 and 1951, more than 10 times the amount sold for such purposes in 1949. This effect was a gratuitous happy coincidence since world-wide price rises for certain agricultural products after 1950, in combination with short-term credits from Europe, helped the Minister's private investment program. But not directly financing any part of the industrial program, the bank had bypassed a good opportunity to earn itself some public recognition among Afghans for promoting quickly maturing investments to which it contributed indirectly, if unwittingly.

As long as the bank had given agricultural projects such a high priority its staff should have followed up the warnings of its engineer in 1951 and attempted to direct the Government toward some short-term investments through which food production could be increased with relatively little money and administrative effort, to run concurrently with the long-term dam and canal projects. As United Nations farm technicians demonstrated late in 1950 and early 1951, simple changeovers to better tools, seeds, and application of fertilizers (tested since 1948 by M-K's agronomist) could have boosted crops (and exports) on the old acreages between 20 and 30 percent in 2 to 3 years. Widespread use of the new methods would have required some foreign-exchange expenditures. The bank's money for this purpose might well have gone into salaries of American extension leaders and trainers, and equipment and material for agricultural stations and demonstration centers in the major agricultural regions.[93]

In the absence of a point 4 program in Afghanistan and in view of the failure of the U. N. Technical Assistance Mission to interest itself in the Helmand projects, the land development phase should have been included in the projects approved by the bank, requiring either an extension of the M-K construction contract or a separate contract with another organization.[94] The Government, the contractor, and Helmand Valley settlers would have benefited from this type of program, from 1950 on. As matters stood in July 1953, it became the responsibility of point 4 agencies in Washington to expand their small force to handle the soil and water problems of thousands of settlers waiting for expert assistance.

Repayment ability

Perhaps certain other factors related to repayment ability should have been given more weight. As the repayment terms will work out, about $2.3 million plus interest on the balance outstanding will have to be paid each year, seemingly leaving a margin wide enough for future developments, for 9 years starting in 1956. But disappoint-

[93] Significantly, M-K's first recommendations in its report on Development of the Helmand Valley' December 1947, put improvement of agricultural methods ahead of regularization of water supply and reclamation of new lands. This order of priority was subsequently dropped.

[94] As discussions about the second loan got under way, the bank seems to have accepted a more comprehensive approach and insist on a satisfactory organization of the human resources for a project before undertaking financial responsibility for its dollar cost. See also press release on the loan to Haiti, April 23, 1951.

ing developments since the loan was granted have thrown new light on the relative size of this burden. Need has developed for unforeseen postproject investments (without which the first investment could not pay off) and for further dollar outlays on replacement parts, fuel, supplies, and engineering services.

Moreover, the 1952 karakul production was the smallest on record; 1952 exports to the United States had slumped to less than two-thirds of the 1951 value. Skin shipments in the first quarter of 1953 were again 20 percent below the previous year. With imports remaining high, official dollar reserves were at a mere $1.5 million on March 31, 1953. Whether this means that a substantially smaller proportion of total foreign exchange can be spent on investment in the future than has been in the past, making investments like the recent ones of the private group difficult if not impossible after 1956, would seem to depend on the recovery of the karakul market in New York (of which there was no sign in mid-1953) and/or the further expansion of raw-cotton exports above the remarkable 8,000 tons reached in 1952 and the solution of the wheat deficit crisis. The fact that the Afghan Government could not spare $1.5 million to buy 10,000 tons of flour to supplement the reportedly poor 1952–53 crop and had to ask for this sum under the United States Mutual Security Program illustrates the precarious status of its foreign exchange position.

This raises the question whether the bank selected the most appropriate terms for the loan. Here the bank ran afoul its subtle distinction between loans to single-asset borrowers like private entrepreneurs and multiasset loans to public agencies. In the latter case the bank's terms generally do not reflect the particular project's economic payout schedule but rather the borrower's general ability to repay in foreign exchange. In the former case it ordinarily has no other choice but to follow the payout schedules. In the case of Afghanistan's nearly single-export-crop economy, this distinction became academic.

The Government's financial capacity was determined, as events to mid-1953 indicate, by one asset alone, karakul. Hence it could have qualified for either of two treatments. It could have been given the terms available to a private body relying on the project's exchange earning capacity as the exclusive determining factor. Such terms would have been similar to the repayment terms offered to settlers on Federal reclamation projects (up to 40 years) in the United States. (This in fact had been suggested by M-K's president.) Or, if the bank wanted to rely on the New York market value of Afghan karakul as the bellwether of the country's repayment capacity it should have been guided by a sober appraisal of that market, not by the exaggerated optimism of Minister Madjid. In retrospect, the proposal of the Afghan Government for an 18-year repayment schedule appears more defensible than the bank's own 15½-year schedule. The 23-year schedule granted Haiti for its Artibonite Valley project might have been still more appropriate.

Also, too little attention was paid to the costs burdening the settler and his family. Although settlers had to have some money or implements of their own and the Government was ready to loan money for a house and some tools, the need of the settlers for funds to improve farmsite installations was overlooked. Additional credits and government work became inevitable, taxing the Government's ability to purchase exchange for servicing the loan.

Economic rivalry in the development program

Political differences within the Government (between the group closely linked with the royal dynasty and the mercantile-financial business interests) tended to overshadow what was perhaps a more significant conflict in economic policies. One of the major factors giving rise to increasing tension had been the marked increase in private capital concentrated in the hands of a few persons and families whose personal fortunes rose (accompanied by some conspicuous consumption). Much of the new capital investment in textile, sugar, power, transportation, and mercantile undertakings had followed from an accumulation of profits over a period of inflationary price rises. The incentive to invest and reinvest in fixed assets was high, as their monetary value promised to rise along with the general price level. Voluntary savings of the people at large—to the extent that they existed—did not contribute much to these investments.

The absence of many small savers induced the stock companies and proprietary businesses to rely on undistributed profits as a source of finance. In order to accumulate sufficient amounts, they raised prices, thus incurring public ire. Occasionally, when the rate of general price increases over a year exceeded the interest rate, these funds were used for speculation in commodities rather than investment, generating further dislike of the profiteers. Occasional Government efforts to restrain business no doubt had popular support. But mere restraint of profiteers could not be equivalent to taking over investment functions unless the Government increased its own investment. To do so the Government would need more money quickly—and an investment philosophy to go with it. Tax rates and revenues had increased and Government investment funds had started flowing faster, but not fast enough to substitute for the large profits continually accruing to the business group. Moreover, the latter was more continuous in its efforts and consistent in its policy. The Government proceeded in 1951 to take over some private monopolies and thereby created considerable uncertainty in the private segment. As long as that segment did not transfer its earnings overseas or hoard them or play the black market, and as long as the Government could not command enough managerial talent to run all economic development on its own, it had to cooperate fully with the private group.

There was growing Government recognition of two facts: (1) By progressive taxation on distributed profits (and a low one, or none, on undistributed ones) and by a large inheritance tax, the dislike for profiteering enterprise could perhaps be reconciled with rapid capital formation; (2) the political and social danger of economic stagnation (for lack of investment) was greater than the political and social danger of a perhaps heretic opposition to a mismanaged government controlled by a well-entrenched dynasty.

The political dynamics of lending money

The loan had a strong impact on the power position of the two rival groups. It could not have taken long for the bank and the State Department to realize that in a country where political power is divided between two groups only, economic support from abroad must of necessity be equally polarized. Foreign financial aid for a development project, particularly from a country whose technological and economic achievements had earned itself much goodwill and respect

in the Middle East, bore on the political prestige and social power of the groups directly benefiting. Thus, a decision to lend money in Afghanistan was also a decision to lend political support to the borrower, whether or not this was intended by the lender.

The bank was not directly concerned with the internal political aspects of projects submitted for financing. But the State Department should have been able to relate the bank's selection of projects to the political repercussions. A loan confined to public works projects could only have the effect of strengthening the position of the Government and the group running it. Rejection of Minister Madjid's industrial projects meant denial of recognition to a group that could effectively preach and carry out a development philosophy. This group perhaps deserved the kind of support the rising bourgeoisie in France in the 18th century needed and obtained in order to overcome the obsolete mercantilistic economics of the French monarchy.

Under circumstances prevailing in Afghanistan that was 1 more reason for the bank to accept at least 1 industrial project for financing. Closer cooperation with State Department and American Embassy officials in Kabul might have given bank officials the necessary political insight. The result would have been not only a quicker dollar return but also a more balanced distribution of its indirect political support among more groups.

From the angle of international politics, a serious question may be raised about the relationship of the loan to the Helmand River Delta Commission's findings on Iran-Afghan apportionment of delta water. The latter should have preceded bank authorization for financing the Kajakai Dam and diversion facilities. The serious results of this lack of coordination became evident when 1952 aerial surveys revealed less potential Afghan upstream acreage, the Commission having already found Iranian delta acreage served by the Helmand much higher than estimated. As the Kajakai Dam neared completion, it became clear that the dam would benefit the Iran-Afghan Helmand delta as much as it did Afghanistan's upstream benches and tablelands. So an Afghan-Iranian agreement became essential to proper Helmand development.

It would be easy to proceed with a listing of the many constructive contributions made by the men at both ends who have made the loan to Afghanistan the limited success it is. Those who wish to draw lessons from it, however, will be more attracted by the omissions and defects in the approach of the Afghans, M-K, the bank, and the adviser to Afghanistan's financial troubles. It would be futile to search for a weakness common to them all. To say the Afghans generally suffered from inadequacies in economic training, inefficient administration, and lack of staff would be misleading, since these obstacles did not impede the progress, albeit costly, of the private business group. Better use by the Government of those already trained and a more determined effort to train more might have provided part of the answer.

On the other hand, M-K, the bank, and the adviser could have insisted on certain decisions and measures as conditions for launching the projects with American Government funds. Surely, some mistakes could have been avoided by a more intensive exchange of views

between the various United States agencies involved. These steps could not have eliminated the basic risk in financing a construction venture in an area needing aid for urgent social, political, and economic considerations for which detailed data could not soon be secured. But these steps might have lessened the financial risks. The cost of experimental financing could have been held down by controlling, as far as humanly possible, the conditions under which it was conducted.

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